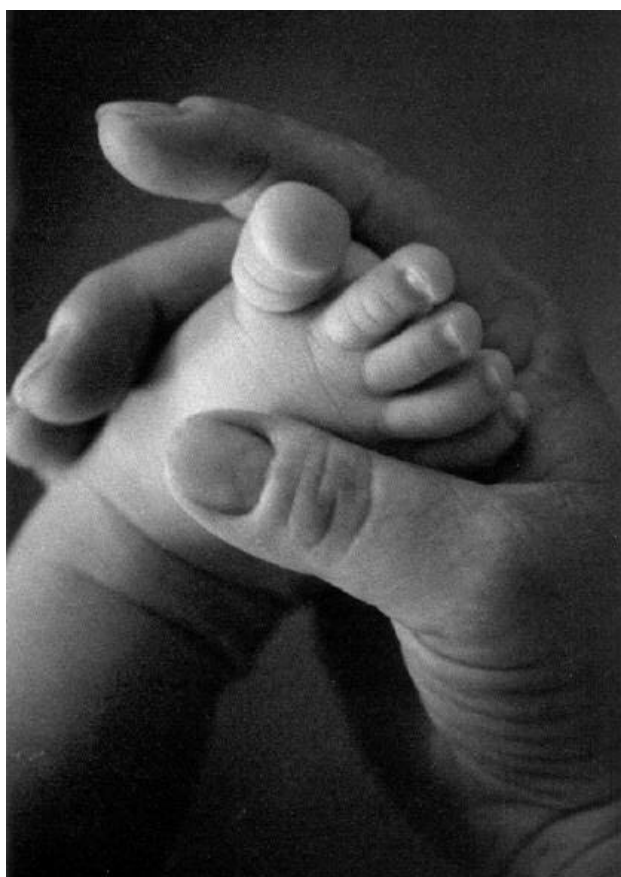


# **The Status of Children and Adolescents in the Americas**

## **A Regional Perspective**



**End of the Decade Report**

**1990 - 2000**

**Population, Health and Nutrition Information Project**

**November 2000**

**Prepared by the**  
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## ABOUT THIS REPORT

The purpose of this report is to provide an overview of the progress made in the Americas toward the health, nutritional, environmental, and educational goals established by the 1990 World Summit for Children and reaffirmed in the Lima Accord of the 1998 Fourth Ministerial Meeting on Children and Social Policy in the Americas. The report was compiled from July to October 2000 to assist in preparations for the Fifth Ministerial Meeting held in Jamaica in October 2000.

The report includes information related to the following goals:

- Reducing maternal mortality
- Providing pregnant women with prenatal care and care during childbirth
- Providing couples with the means of controlling pregnancies
- Reducing infant and under-five mortality
- Reducing severe and moderate malnutrition among children under age 5
- Maintaining high levels of immunization coverage
- Achieving universal access to basic education and completion of primary education
- Providing adolescents with the means of preventing human immunodeficiency virus infection and other sexually transmitted infections
- Reducing adult illiteracy

The analyses presented in the report utilize data from published sources to measure trends. Primary questions used in guiding the analyses include:

- Have the Americas progressed toward goal achievement over the past decade?
- Are there differences among the American subregions in their progress toward goal achievement?
- Are there variations in goal progress within and among subregions by rural-urban residence, socioeconomic levels, sex, or age?
- Are there trends or patterns of variation in the indicator data pertaining to the goals that have implications for regional or subregional policy and strategic planning?

## *Data, Methodology, and Presentation*

The data used in this report were the best available at the time the report was prepared. Most of the indicator data come from the United Nations Children's Fund (UNICEF) or other United Nations databases or publications. Other data are drawn from Demographic and Health Surveys (DHS) and Family Health Surveys/CDC.

Longitudinal data for accurate trend analysis are limited for many indicators. In some cases, two slightly overlapping time periods had to be used to provide some basis for comparison. This method is likely to obscure trends in either direction. In other cases, trend data exist for only a few countries and are presented as examples. When a country has data for one time period and not the other, the country is excluded from calculation of the overall regional averages.

Population data used for weighting regional and subregional averages are taken from *United Nations World Population Prospects, 1998*, the latest available United Nations estimates. When countries are missing from the aggregates, the proportion of population represented is reported in the endnotes. When less than 50 percent of a subregion's population is represented, the weighted average is not shown.

In order to follow the organization of the 1998 Ministerial Meeting, the report is structured on a life-cycle model of protecting human rights and health. Indicators are grouped into the following life-cycle categories:

- Prenatal care/delivery/safe motherhood
- Infancy and early childhood (0-5 years of age)
- Primary school age (6-14)
- Adolescence and young adulthood (15-24)
- Adulthood and community

Each one-page presentation cites the pertinent Lima Accord goal and defines the indicator used. A graphic presentation of the indicator data and data interpretation follow.

## *Subregional Analysis*

To meet the needs of the Ministerial Meeting, the American subregions used for the analyses are defined somewhat differently from the usual categories of North, Central, and South America, and the Caribbean. Seven subregional groupings were used and presented in the following order:

- Mercosur (comprising Argentina, Chile, Paraguay, and Uruguay)
- Andean (Bolivia, Colombia, Ecuador, Peru, and Venezuela)
- Central America (Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama)
- Caribbean (the island nations of the Caribbean plus the mainland countries of Belize, Guyana, and Suriname)
- Brazil
- Mexico
- North America (Canada and the United States)

Brazil and Mexico are treated as separate subregions due to their relative size and regional significance.

Some presentations combine data from the subregions. To separate the industrialized countries of Canada and the United States from developing countries, the designation “Latin America and the Caribbean” or “LAC” excludes North America, while “All Americas” includes North America. In some cases, aggregated data were taken directly from a source where different subregional classifications were used. These cases are noted in the endnotes.

In order to compare Latin America and the Caribbean with other world regions, aggregated data were taken directly from the source (United Nations or UNICEF), and the source’s definitions of world regions were used. These instances are also noted in the endnotes.

## INTRODUCTION

During the 1990s, the Americas led all regions of the world in improving the health and welfare of children and adolescents. Foremost among public health milestones was the eradication of poliomyelitis in Latin America and the Caribbean. In addition, the populations of Latin America and the Caribbean benefited from a remarkable expansion of educational opportunities.

Despite dramatic accomplishments and impressive gains, the subregions of Latin America and the Caribbean still have pressing needs. To sustain and expand upon the advances of the '90s, the gaps between wealthy and poor countries and between wealthy and poor populations within countries must be narrowed. Also, the needs of women and the growing adolescent population must receive increased, intensified attention.

### *Health, Nutrition, and Environmental Rights*

In the 1990s, Latin America and the Caribbean made significant strides toward meeting the goals set forth at the 1990 World Summit for Children and reiterated in the Lima Accord of the 1998 Fourth Ministerial Meeting on Children and Social Policy in the Americas. In addition to the eradication of polio, highlights of the decade in the areas of health and nutrition included:

- A decrease in the number of children born per woman
- Increases in safe motherhood practices, such as modern contraceptive use and the attendance of trained medical personnel during a woman's pregnancy and delivery
- Decreases in childhood morbidity and mortality, achieved mainly through increases in breastfeeding and vaccination coverage and in improvements in the care of sick children
- Decreases in malnutrition and micronutrient deficiencies

Such positive changes did not occur evenly, however. Results varied greatly between subregions, between rich and poor countries, and between the rich and poor, the urban and rural, and the educated and less-educated populations within

countries. To sustain the last decade's progress, efforts to close such gaps will have to continue in the new decade. The HIV/AIDS epidemic also needs urgent attention and action, as do other causes of death and disease burden in children and adolescents, including vehicular accidents, interpersonal violence, alcohol dependence, unipolar major depression, drowning, falls, dental caries, and asthma.

### *Right to Education*

A policy of universal access to basic education became the norm in Latin America and the Caribbean during the last decade. This progress can only be continued by:

- Breaking the poverty cycle, so that children from homes with limited resources can continue their educations through at least eight years of school
- Ending the use of the young in the labor force, so that educational opportunities for the poor are expanded
- Ending the persistent large differences in literacy between urban and rural populations. While the 1990s saw an important reduction in illiteracy, the goal of reducing illiteracy by half was not met. In particular, rural women and indigenous populations lag behind in achieving literacy.

### *Gender Equity and Women*

The protection of women's rights advanced significantly in Latin America and the Caribbean in the 1990s. Concerns that need to be addressed for these advances to continue include:

- Adolescent motherhood, particularly among poor and rural populations
- Violence directed at women, which remains a significant problem
- Employment appropriate to a woman's educational level. Gains in employment opportunities, unfortunately, did not keep pace with women's educational gains.

### ***Child Protection Rights***

The protection of children and their rights also received considerable attention during the '90s. Child and adolescent rights in Latin America and the Caribbean remain vulnerable, however, especially the rights to:

- A safe environment (in particular, an environment free of violence against and among adolescents and children)
- A registered family name and nationality as part of a universal birth registry
- Appropriate child and adolescent labor laws
- Institutional means of guaranteeing and reinstating rights

The following pages present data and discussions of the progress made in the 1990s in Latin America and the Caribbean toward the World Summit/Lima Accord goals in the areas of health, nutrition, environment, and education.

## *World Summit for Children (1990)/Lima Accord (1998) Goals*

### *Health, Nutrition, and Environment (HNE) and Education (Ed) Rights*

*(Arranged in stages of the life-cycle model)*

#### *Prenatal Care/Delivery/Safe Motherhood*

- HNE Goal 2: Reduce maternal mortality by half.
- HNE Goal 15: Provide all couples with access to information, education, communication, and services to prevent pregnancies that are too early, too closely spaced, too late, or too numerous.
- HNE Goal 16: Provide pregnant women with access to prenatal care and to trained attendants who will be able to assist them in childbirth and provide care and attention in cases of high-risk pregnancies and obstetric emergencies.
- HNE Goal 17: Reduce the rate of low birthweight (2.5 kg or less) to less than 10 percent.

#### *Infancy and Early Childhood (0-5 years of age)*

##### *Mortality*

- HNE Goal 1: Reduce infant and under-five child mortality by one-third or to 50 and 70 per 1,000 live births, respectively, whichever is lower.

##### *Diet and Nutrition*

- HNE Goal 3: Reduce by half severe and moderate malnutrition among children under 5 years of age.
- HNE Goal 4: Reduce iron deficiency anemia by one-third.\*
- HNE Goal 5: Virtual elimination of disorders related to iodine deficiencies.
- HNE Goal 6: Virtual elimination of vitamin A deficiency and its consequences, including blindness.
- HNE Goal 18: Ensure exclusive breastfeeding during the first six months of life and continue breastfeeding, along with complementary food, up to the second year.
- HNE Goal 19: Undertake universal promotion of child growth and psychosocial development in children under 5 years of age, with a focus on both malnutrition and obesity.\*

##### *Early Childhood Diseases*

- HNE Goal 9: Eradication of poliomyelitis.
- HNE Goal 10: Virtual elimination of neonatal tetanus as a public health problem.
- HNE Goal 11: Reduce deaths caused by measles by 95 percent and reduce cases of measles by 90 percent. Virtual elimination of measles as a public health problem.
- HNE Goal 12: Maintain a high level of immunization coverage (at least 90 percent of 1-year-olds) against diphtheria, whooping cough, tetanus, measles, poliomyelitis, and tuberculosis, and against tetanus for women of reproductive age.
- HNE Goal 13: Reduce deaths from acute diarrheal disease by 50 percent.
- HNE Goal 14: Reduce deaths from acute respiratory infections by 25 percent.
- HNE Goal 21: Develop prevention programs to reduce the incidence of disability in girl and boy children. Such programs will permit the routine evaluation and diagnosis of physical and mental illness in early childhood.\*
- HNE Goal 23: Provide integrated care to 50 percent of children under 5 who require care for childhood diseases.\*

##### *Education*

- Ed Goal 2: Expand early child development, including low-cost interventions among families and communities.

### *Primary School Age (6-14 years of age)*

- HNE Goal 20: Ensure access of parents to relevant information about child rearing, child and adolescent development, and a healthy family life.\*
- Ed Goal 3: Universal access to basic education and full primary education for at least 80 percent of children of school age through either formal or nonformal education that provides equal standards of learning and puts an emphasis on reducing disparities between girls and boys. Accomplish universal access to primary education in equal terms from the viewpoints of gender, geographic location, ethnic, socioeconomic background, and special needs groups.

### *Adolescence and Young Adulthood (15-24 years of age)*

- HNE Goal 22: Ensure universal access to information, education, communication, and to the appropriate means for the prevention and control of infection from HIV/AIDS, sexually transmitted diseases, and their consequences.

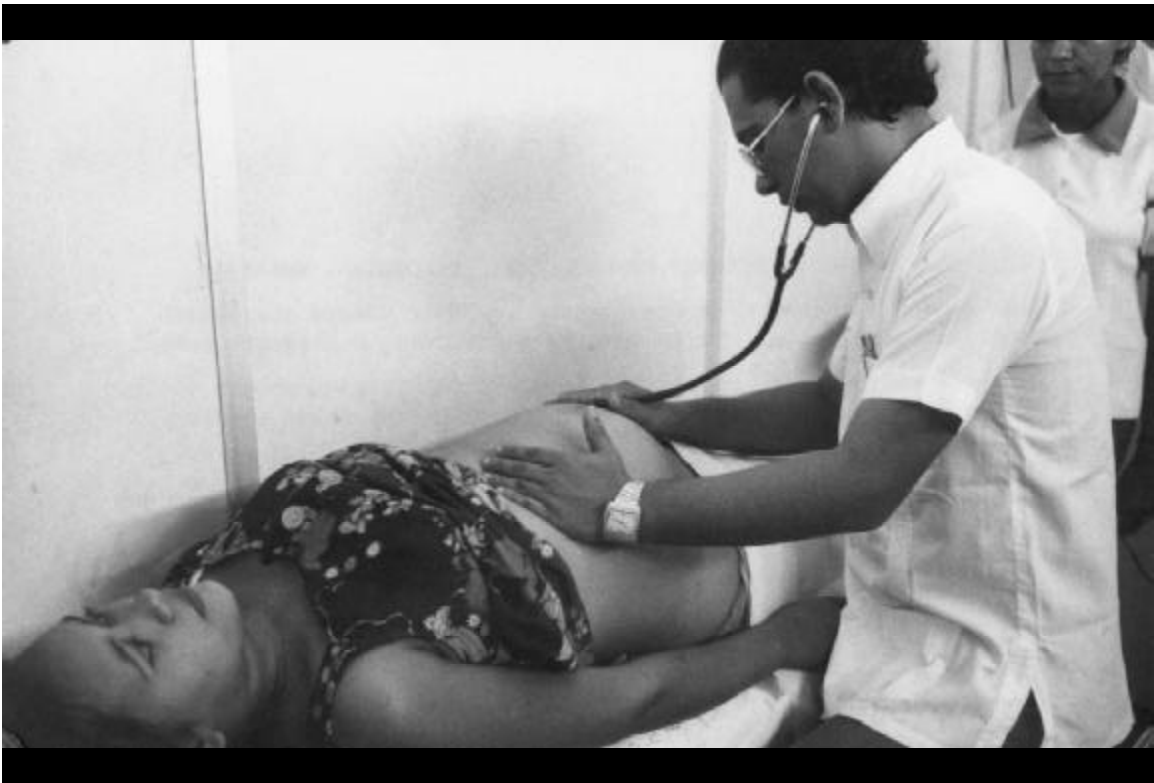
### *Adulthood/Community*

- HNE Goal 7: Universal access to safe drinking water. Reduce the proportion of the population without access to safe drinking water by 25 percent.
- HNE Goal 8: Universal access to hygienic means of excreta disposal. Reduce the proportion of the population without access to basic sanitation by 17 percent.
- HNE Goal 24: Promote food safety for all households. This implies universal access of households to culturally acceptable nutritious food in adequate quantities.\*
- HNE Goal 25: Encourage action in environmental conservation as set forth in the United Nations Conference on Environment and Development, promoting education and awareness-raising activities for the different sectors of society.\*
- Ed Goal 1: Reduce the illiteracy rate among adults by at least 50 percent, with special attention to women's literacy.
- Ed Goal 4: Improve the access by individuals and families to the acquisition of knowledge, skills, and values to enhance their life quality and make them available through all educational channels, including mass media, other traditional and modern means of communication, and social actions, with effectiveness measured in terms of the modification of behavior patterns.\*

\* The present document does not address these goals, in most cases because of insufficient indicator data.

# **PRENATAL CARE/DELIVERY/ SAFE MOTHERHOOD**

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## Maternal Mortality

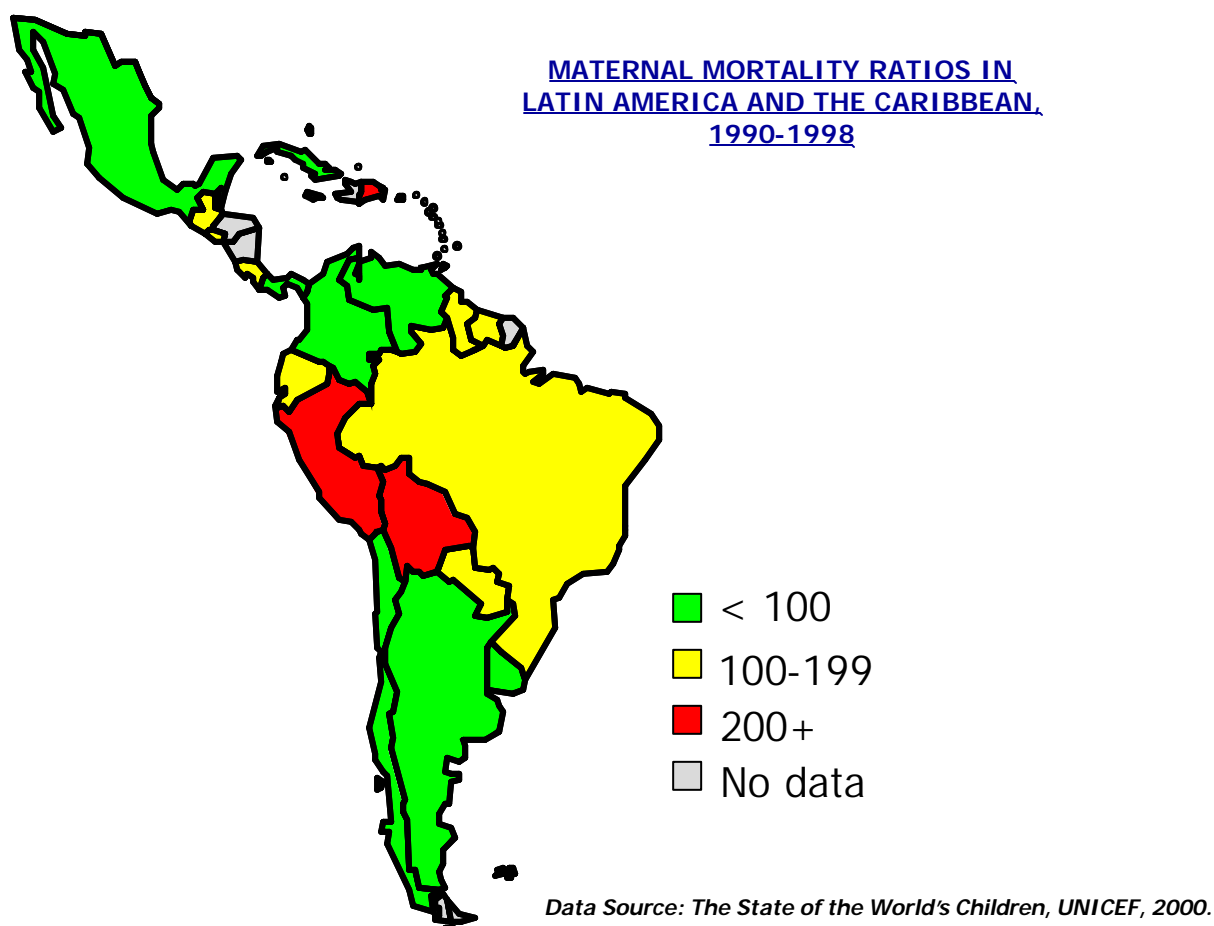
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### Goal

Reduce maternal mortality by half from 1990 levels.

### Definition

The maternal mortality ratio is the estimated number of maternal deaths per 100,000 live births, where maternal death (from any cause except accidents) occurs during pregnancy or within 42 days of termination of pregnancy. Country-reported data are not adjusted for underreporting or misclassification.



- Maternal mortality is difficult to measure for several reasons. Extremely large samples are required to obtain reliable statistics from surveys. Data from other sources are often incomplete or derived from indirect methods with large margins of error.
- Available maternal mortality data are presented here to identify Latin American and Caribbean countries with maternal mortality ratios of less than 100, between 100 and 199, and over 200 maternal deaths per 100,000 births.
- Most maternal deaths are preventable with proper management of pregnancy and delivery and with adequate access to emergency care. While there are insufficient data to indicate trends in maternal mortality, related indicators, such as the number of births attended by trained health professionals, may give some idea of progress toward reducing maternal mortality and morbidity.

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Figure 1

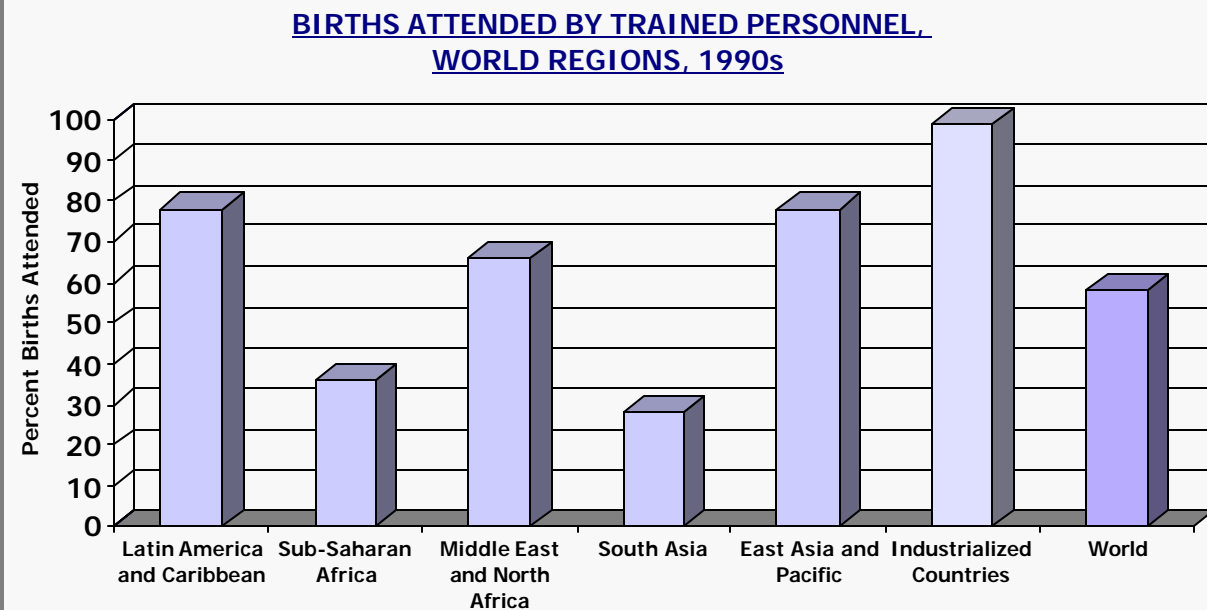
## Safe Motherhood

### Goal

Reduce maternal mortality by half from 1990 levels. Provide pregnant women with access to prenatal care, trained attendants during childbirth, and care for high-risk pregnancies and obstetric emergencies.

### Definition

"Attendance at birth by trained personnel" is the percentage of births attended by medically trained personnel (physicians, nurses, and trained midwives only). It is used to show progress in reducing maternal mortality and morbidity. Trained health personnel can ensure a sterile birth, recognize complications, refer obstetric emergencies, and, depending on the level of training, handle simple complications.



*Data Source: The State of the World's Children, UNICEF, 2000.*

- Trained professionals attend 78 percent of births in Latin America and the Caribbean. This rate equals that of East Asia and the Pacific and is well above the world average of 58 percent, which is brought down by low rates in sub-Saharan Africa and South Asia.
- The Latin America/Caribbean and East Asia/Pacific regions have the highest rates of attended births in the developing world, but they still lag significantly behind industrialized countries, where the attendance of trained personnel at births is nearly universal.

Figure 2

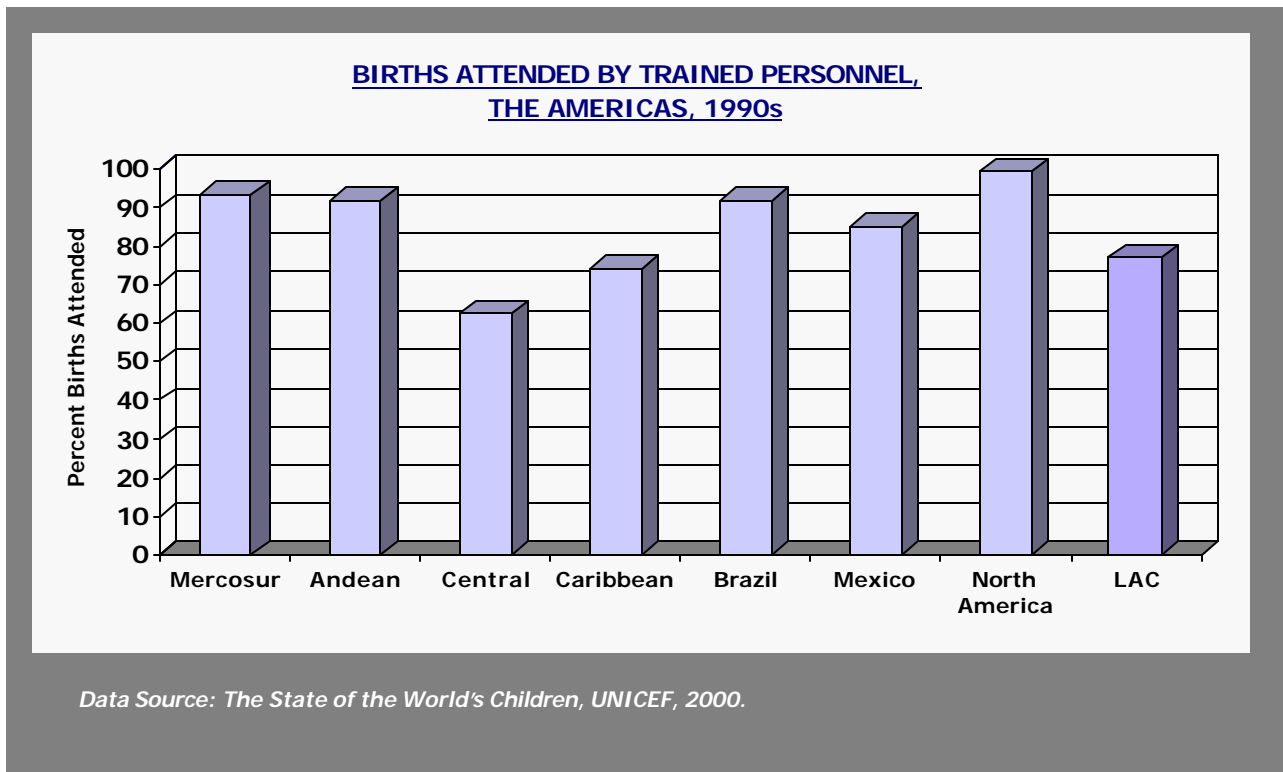
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- From 1988 to 1998, births attended by skilled health personnel rose in Latin America and the Caribbean from 70 to 77 percent.
- Trained personnel attend almost all births in the Mercosur subregion, the Andes, Brazil, and the United States and Canada. Central America lags behind the other subregions with 62 percent of births attended by skilled personnel.
- The averages shown for the Caribbean and Mercosur subregions mask considerable variation. In Haiti, for example, only 21 percent of births are attended by trained personnel, and in Paraguay the rate is 61 percent. In most other Caribbean and Mercosur countries, trained attendants are present at nearly all births.

Figure 3

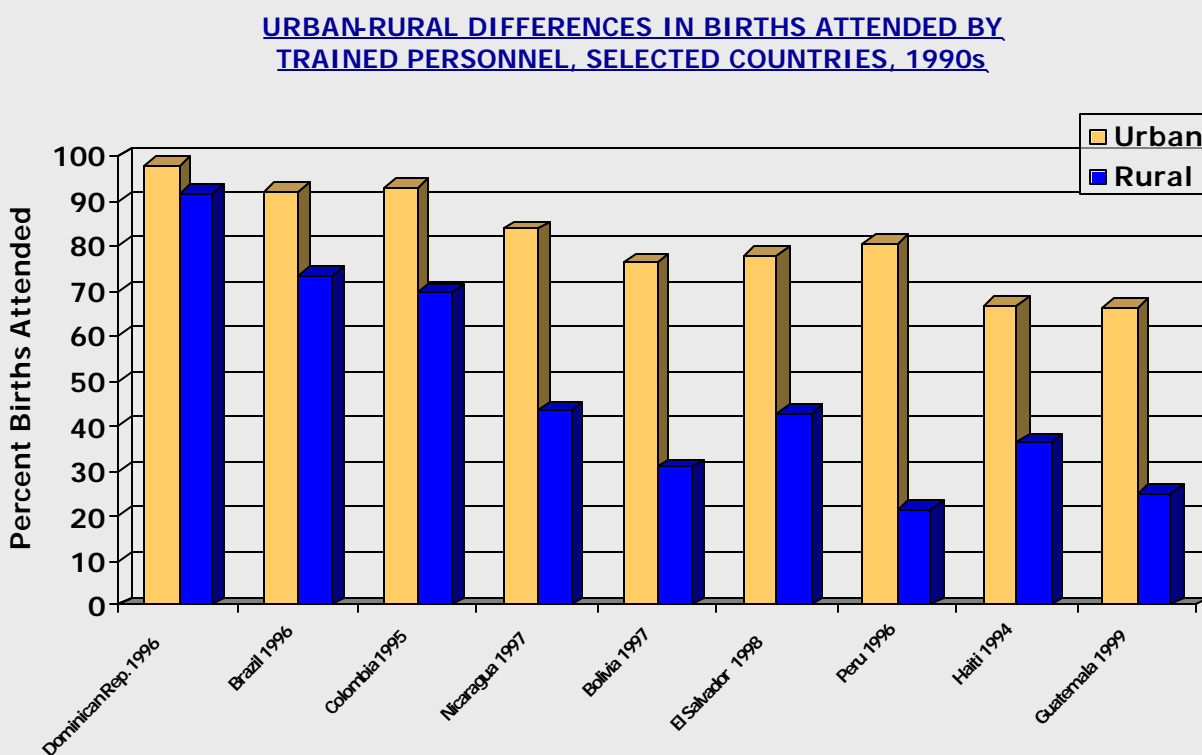
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### Goal

Reduce maternal mortality by half from 1990 levels. Provide pregnant women with access to prenatal care, trained attendants during childbirth, and care for high-risk pregnancies and obstetric emergencies.

### Definition

"Attendance at birth by trained personnel" is the percentage of births attended by medically trained personnel (physicians, nurses, and trained midwives only). One of the factors that influences the use of health services is their availability. In almost every country, health facilities are more numerous and easier to reach in urban areas than in rural areas.



*Data Source: Demographic and Health Surveys, Macro International; El Salvador National Family Health Survey, CDC, 1998.*

- In every country shown, urban births are more likely to be attended by trained personnel than rural births.
- The births of more than 90 percent of urban women in Brazil, Colombia, and the Dominican Republic are attended by trained personnel.
- In general, the countries with the highest overall rates of births attended by trained personnel have the smallest differences between these rates for urban and rural populations. For example, the smallest difference (less than 6 percentage points) is seen in the Dominican Republic, which has the highest rates of attended births for both urban and rural populations.

Figure 4

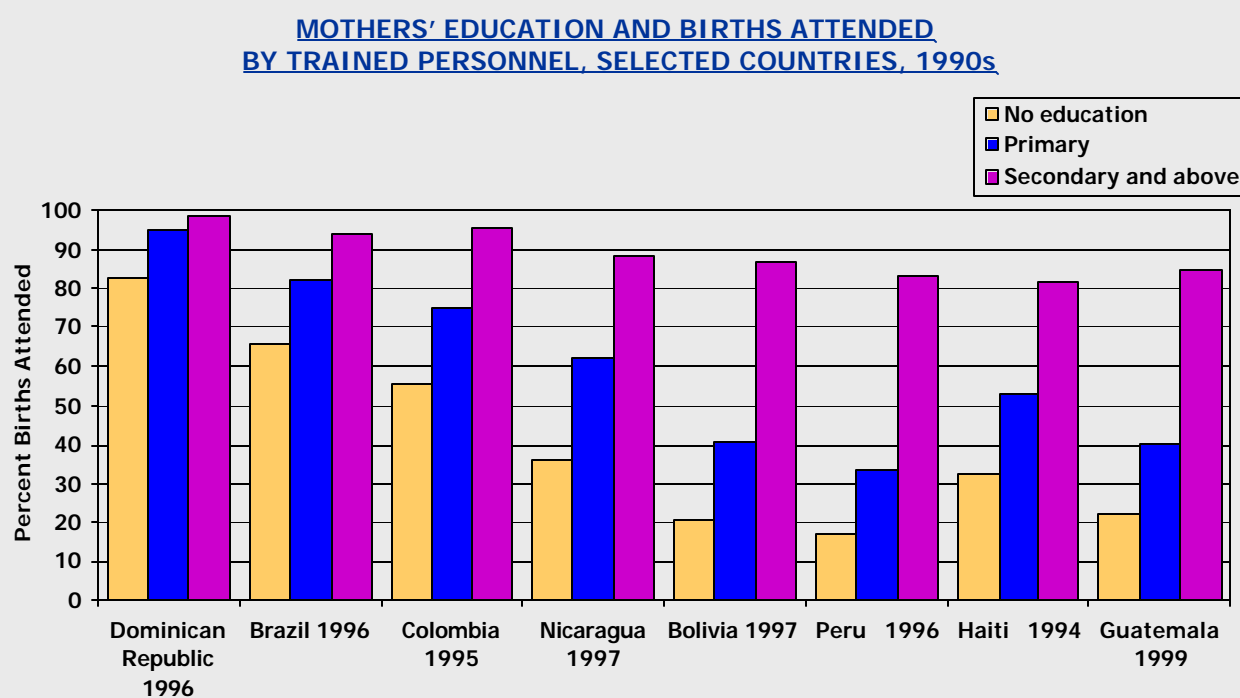
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### Definition

"Attendance at birth by trained personnel" is the percentage of births attended by medically trained personnel (physicians, nurses, and trained midwives only). One of the factors that influences the use of health services is the socioeconomic status of the health care seekers. Women with more education are often more receptive to modern health care technology and may have greater economic means to purchase health services than less educated women.



Data Source: Demographic and Health Surveys, Macro International.

- In all eight countries shown, more than 80 percent of women with at least a secondary-school education have births attended by health professionals.
- In five of eight countries shown, less than 40 percent of women with no education had births attended by health professionals.
- In general, the countries with high overall rates of attended births (Dominican Republic, Brazil, and Colombia) have low differentials across the educational attainments of mothers.
- The countries with the largest disparities between urban and rural areas are the same countries that have large disparities according to mothers' educations.

Figure 5

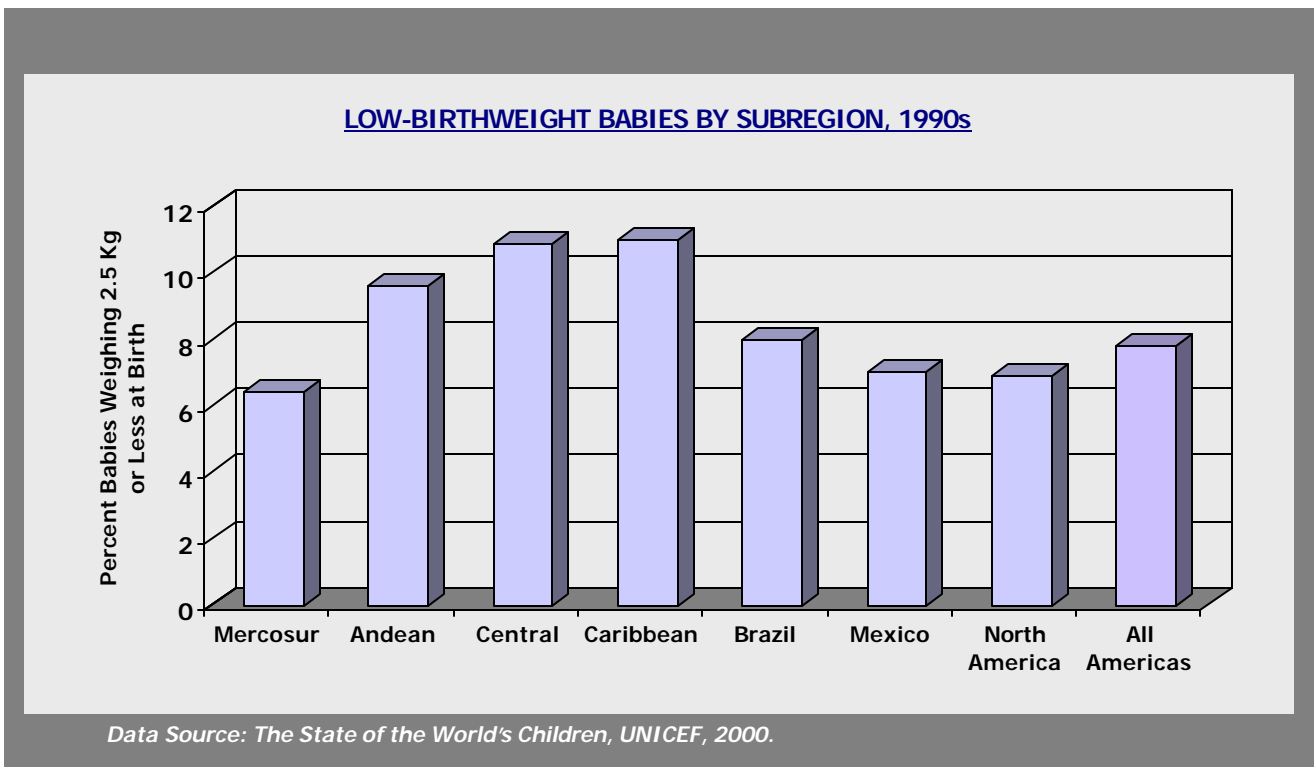
## Low Birthweight

### Goal

Reduce the rate of low birthweight (2.5 kg or less) to less than 10 percent.

### Definition

"Low birthweight" is measured by the percentage of infants weighing 2.5 kg or less at birth. Low birthweight can result from poor maternal health and nutrition during pregnancy. Low-birthweight babies face greater risks of death and disability than heavier newborns. Because maternal mortality is difficult to measure, the percentage of low-birthweight babies is often used as a proxy indicator of maternal health outcomes.



- Fewer than 8 percent of infants born in the Americas weigh 2.5 kilograms or less at birth. This meets the World Summit goal of less than 10 percent.
- Five of the seven subregions – Mercosur, Andean South America, Brazil, Mexico, and North America – have achieved the goal. Central America, with 10.9 percent of newborns weighing 2.5 kilograms or less, and the Caribbean (11.0 percent) are very close to meeting it.
- In the 24 countries of the region for which data are available for both the early and late 1990s, 16 countries succeeded in reducing low-weight births to less than 10 percent or were able to maintain them below that level.
- In Chile, Paraguay, Bolivia, and Belize, less than 5 percent of newborn babies weigh less than 2.5 kilograms.

Figure 6

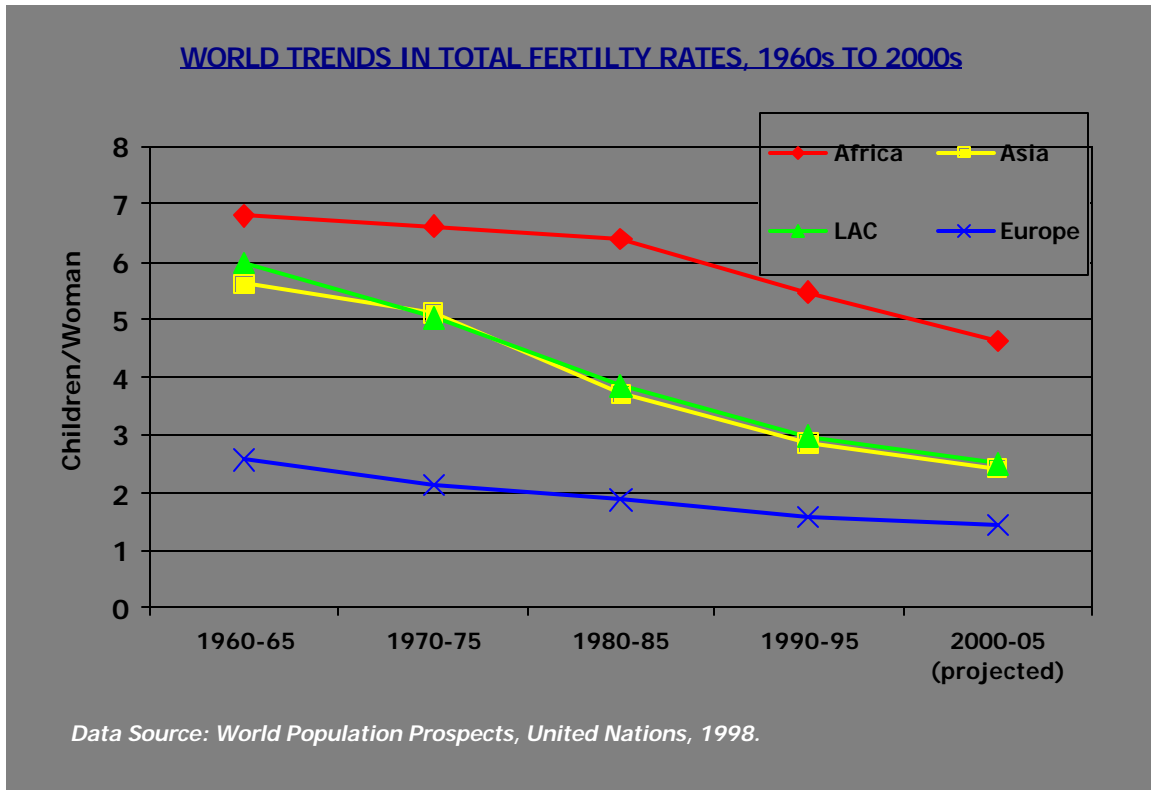
## Fertility

### Goal

Provide all couples with access to information, education, communication, and services to prevent pregnancies that are too early, too closely spaced, too late, or too numerous.

### Definition

The total fertility rate (TFR) is an estimate of the number of children a woman will have in her lifetime. Because the calculation uses *current* age-specific fertility rates, it does not reflect possible future changes in age-specific and total fertility rates.



- Over the last 40 years, total fertility has dropped in all of the world's major regions.
- Latin America and the Caribbean have experienced dramatic declines in fertility. In the early 1960s, the TFR for the region was close to six children per woman; by the end of the century, it had declined to just 2.5 children per woman.
- Africa continues to have the highest TFR, followed by Latin America and the Caribbean, Asia, and Europe.

Figure 7

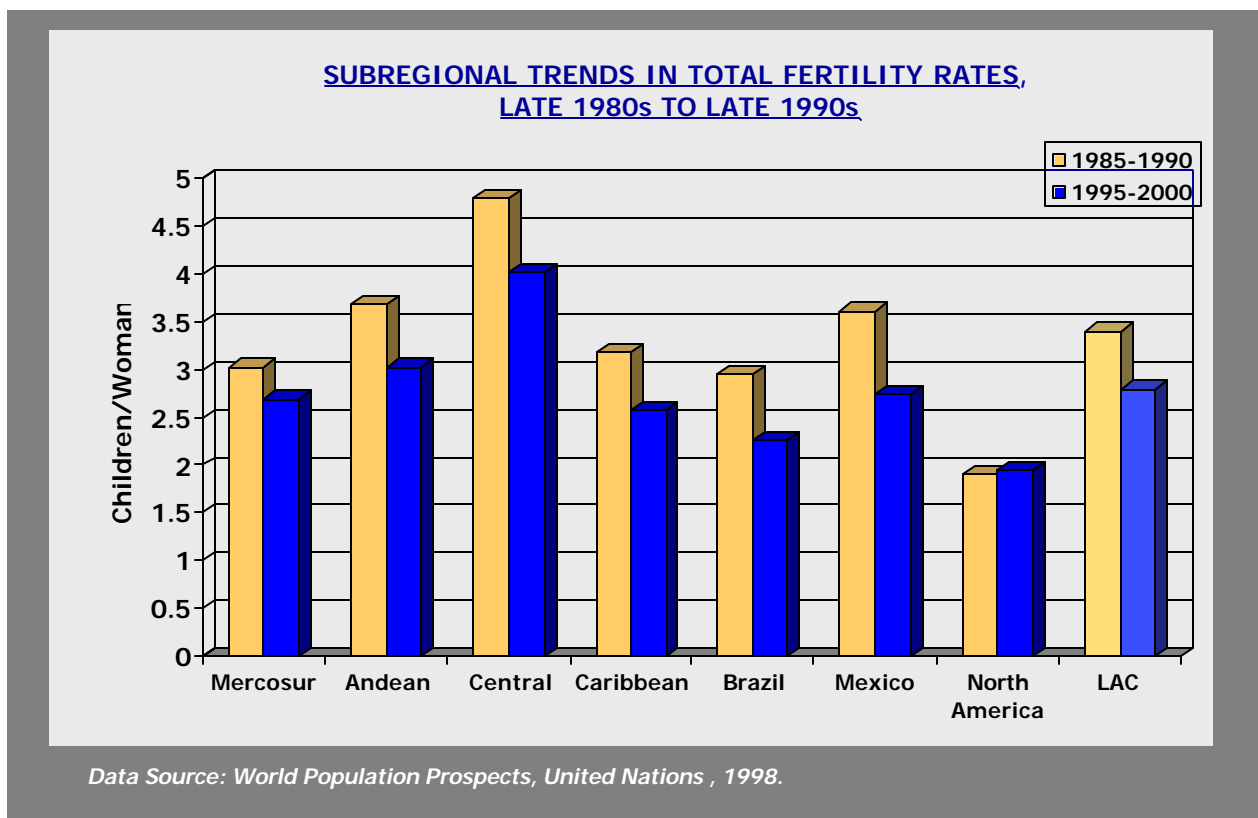
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- Total fertility rates are lowest in the North America subregion, followed by Brazil, the Caribbean, Mercosur, Mexico, Andean South America, and Central America.
- By country, the largest decreases occurred in Haiti, Trinidad and Tobago, Honduras, Belize, and Peru. TFRs decreased by more than 1 child per woman in each of these countries.
- By subregion, Mexico experienced the greatest drop in TFR – from 3.6 to 2.7 children per woman – between the late 1980s and late 1990s. Brazil, Central America, Andean South America, and the Caribbean also reduced TFRs by more than 0.5 children per women over the same time period.

Figure 8

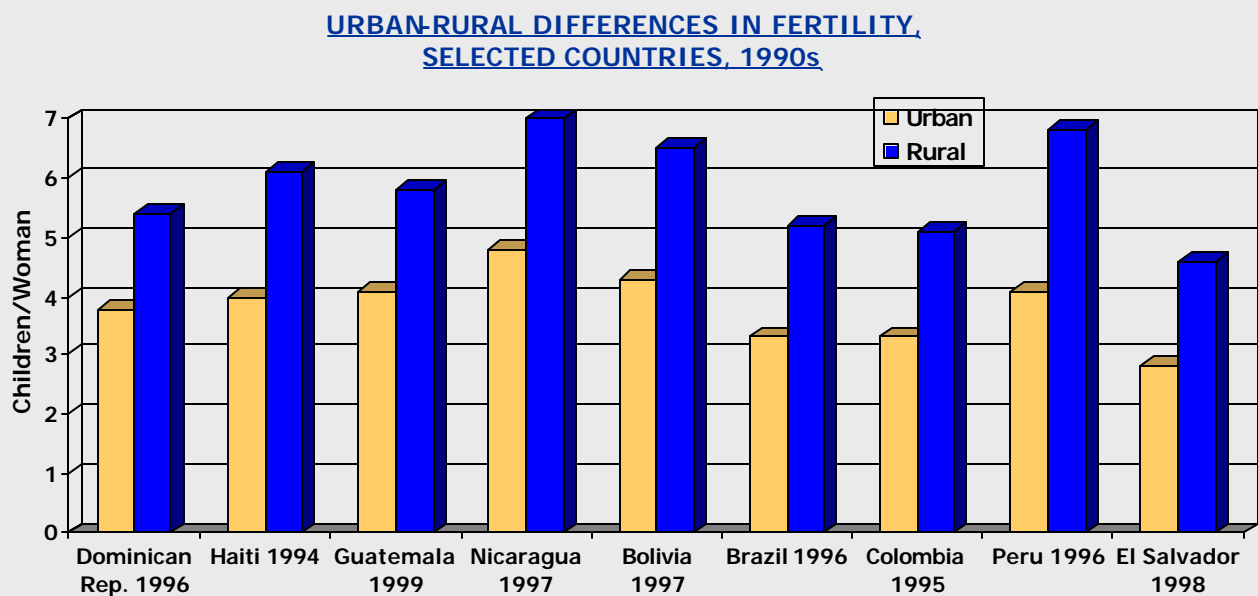
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Data Source: Demographic and Health Surveys, Macro International; El Salvador National Family Health Survey, CDC, 1998.

- Fertility differs widely between rural and urban areas. In each of the countries shown, the TFR is greater for rural women than for urban women. In Peru, rural women have on average 2.7 more children than urban women. The disparity between rural and urban women also exceeds 2 children per woman in Nicaragua, Bolivia, and Haiti.
- Despite a substantial decline in Central America's TFR from 4.8 in the late 1980s to 4.0 in the late 1990s, large differences remain between the TFRs for rural and urban women in each of the subregion's countries. In Nicaragua, the TFR for rural women is 2.2 children per woman higher than for urban women; the difference is 1.8 in El Salvador and 1.7 in Guatemala.

Figure 9

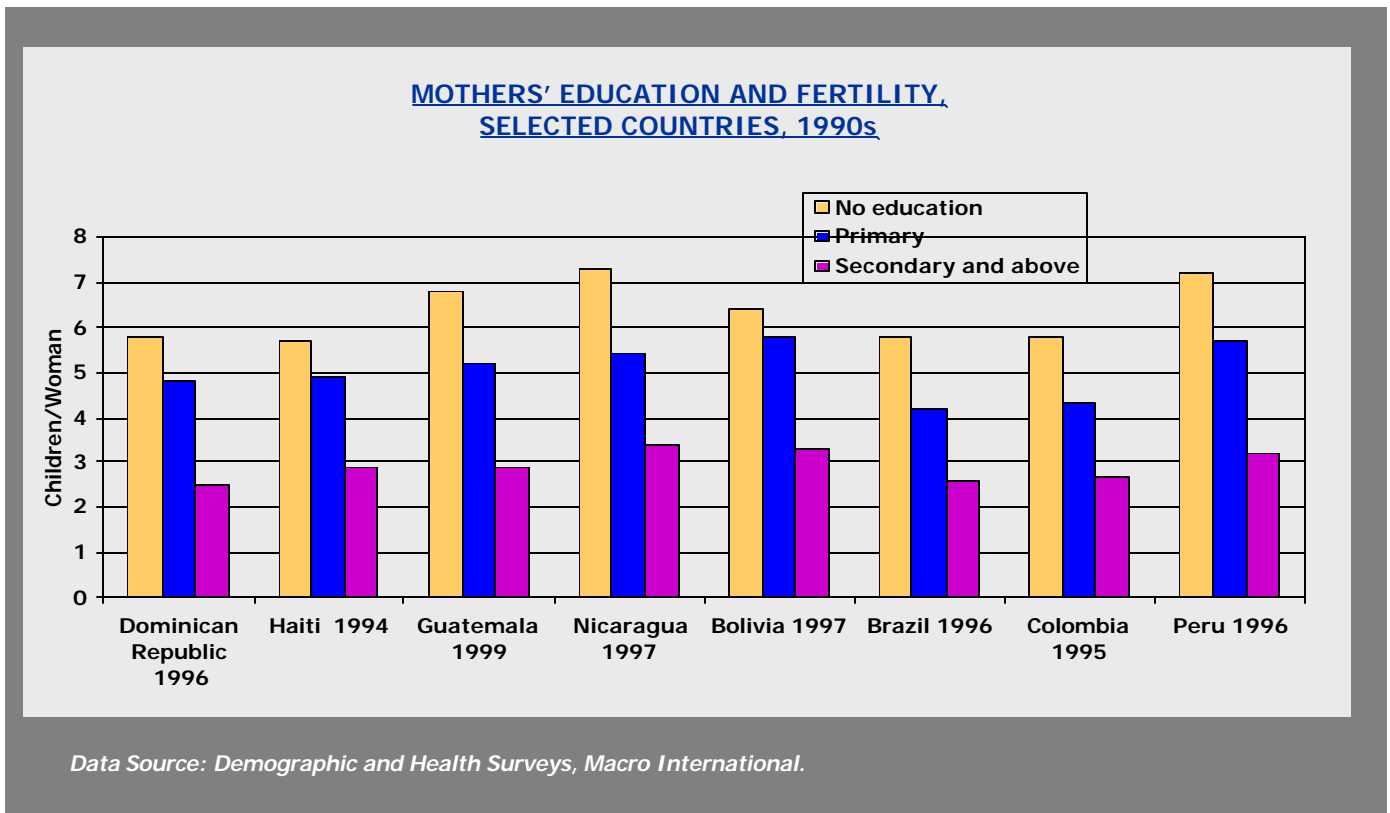
## Fertility

### Goal

Provide all couples with access to information, education, communication, and services to prevent pregnancies that are too early, too closely spaced, too late, or too numerous.

### Definition

The total fertility rate (TFR) is an estimate of the number of children a woman will have in her lifetime. Because the calculation uses *current* age-specific fertility rates, it does not reflect possible future changes in age-specific and total fertility rates.



- Education levels are inversely related to fertility – countries with high educational attainments have relatively low fertility rates and vice versa.
- In the Dominican Republic, Guatemala, Brazil, Nicaragua, Colombia, and Peru, TFRs of women with secondary or higher education are half that of women with no education.
- The graph shows the substantial differences that exist between women with no education, women with primary education, and women with secondary education or higher. The difference between the TFRs of women with no education and women with primary education is less than the difference between those of women with primary education and women with secondary education or higher.

Figure 10

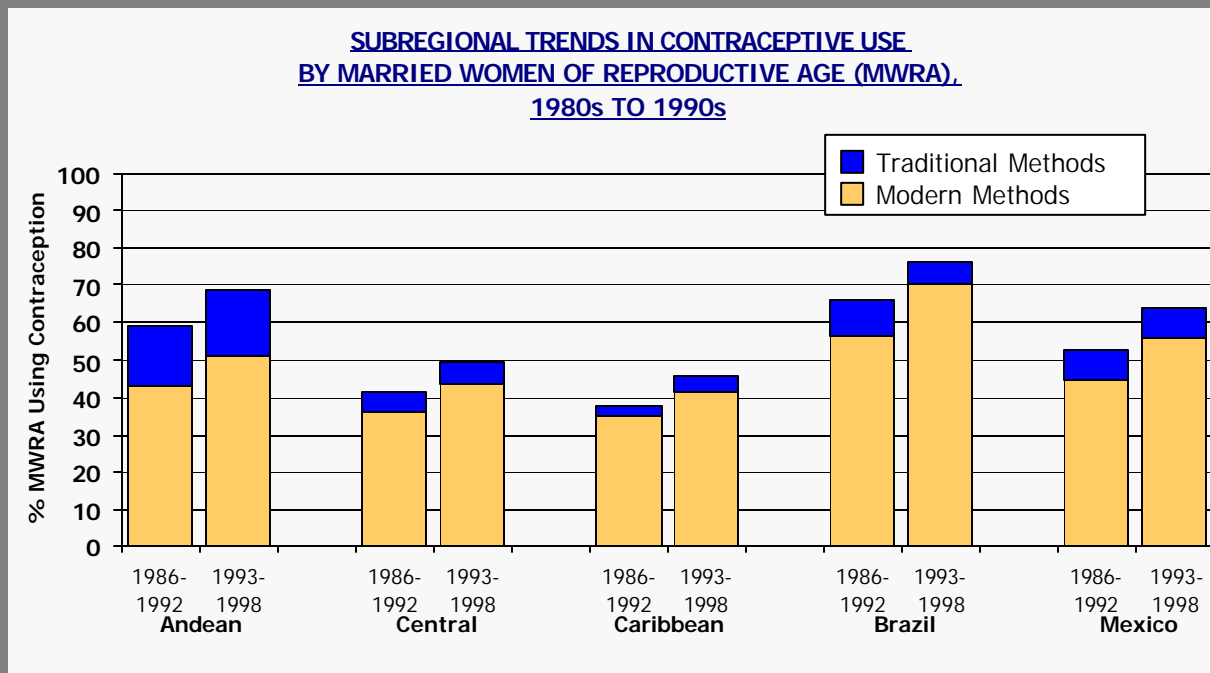
## Fertility

### Goal

Provide all couples with access to information, education, communication, and services to prevent pregnancies that are too early, too closely spaced, too late, or too numerous.

### Definition

The contraceptive prevalence rate is the percentage of married women of reproductive age (15 to 49 years) who are currently using a form of contraception, whether a modern method such as oral contraceptives or condoms or a traditional method such as rhythm or withdrawal.



Data Source: Profiles for Family Planning and Reproductive Health, The Futures Group International, 1999.

- Data on changes in Latin America and the Caribbean in contraceptive prevalence over time are limited. The percentages of reproductive age women represented for each subregion are 79 percent for Andean South America, 100 percent for Central America, and 53 percent for the Caribbean.
- Each subregion shows increased contraceptive use.
- Use of modern methods has risen to substantial levels in Brazil (70 percent), Costa Rica (65 percent), Dominican Republic (59 percent), and Jamaica (61 percent).
- Haiti (14 percent) and Guatemala (27 percent) have much lower rates of modern contraceptive use, but the rates are increasing in all countries.
- Use of traditional methods is increasing modestly in all subregions except Brazil.

Figure 11

# INFANCY AND EARLY CHILDHOOD

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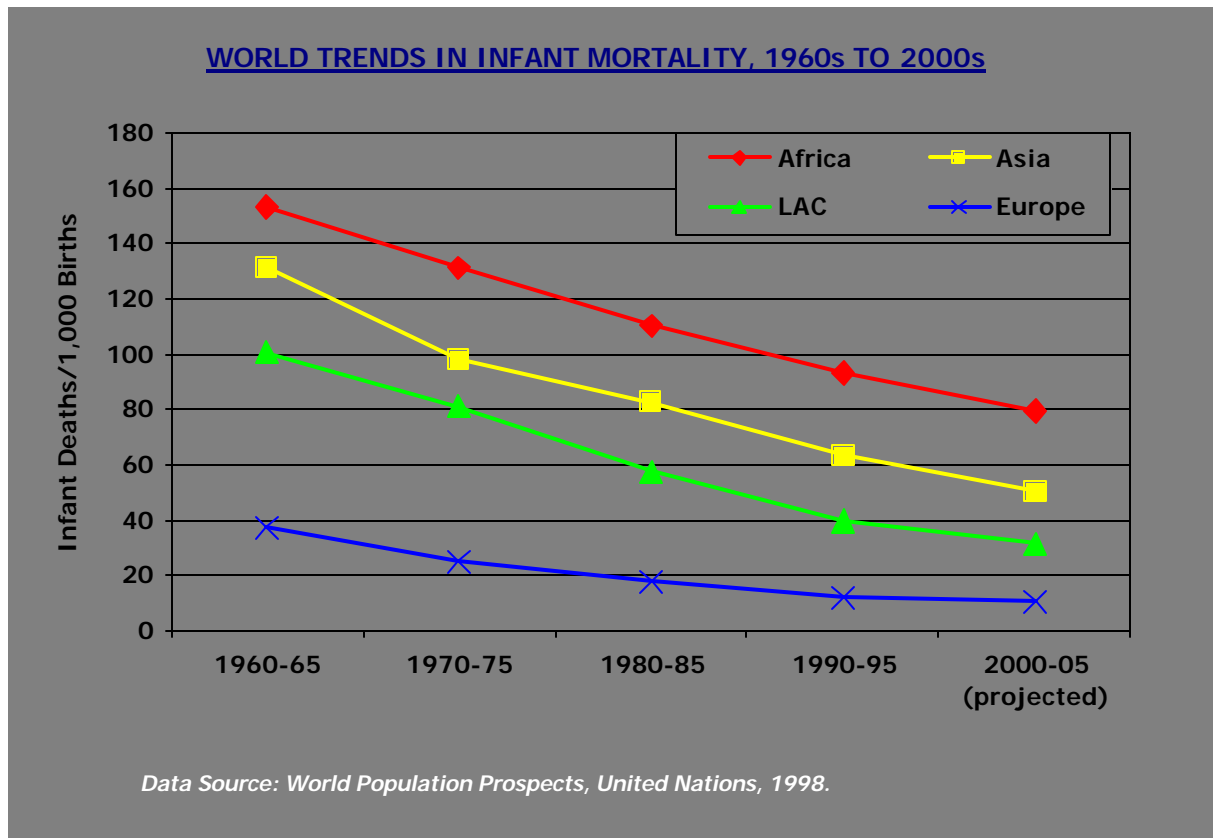
## Infant Mortality

### Goal

Reduce infant and under-five child mortality by one-third or to 50 and 70 per 1,000 live births, respectively, whichever is lower.

### Definition

The infant mortality rate is the number of deaths among children before their first birthday in a given year per 1,000 live births in that same year. The infant mortality rate reflects the results of child survival interventions such as safe deliveries and proper postnatal care.



- Of the four regions shown here, the Latin America and Caribbean region has the second lowest rate of infant mortality. If current trends continue, the infant mortality rate should approximate that of Europe in the near future.
- Africa continues to have the highest infant mortality rate. The gap between Africa and the developing regions of Asia and Latin America and the Caribbean has increased or held steady over time.

Figure 12

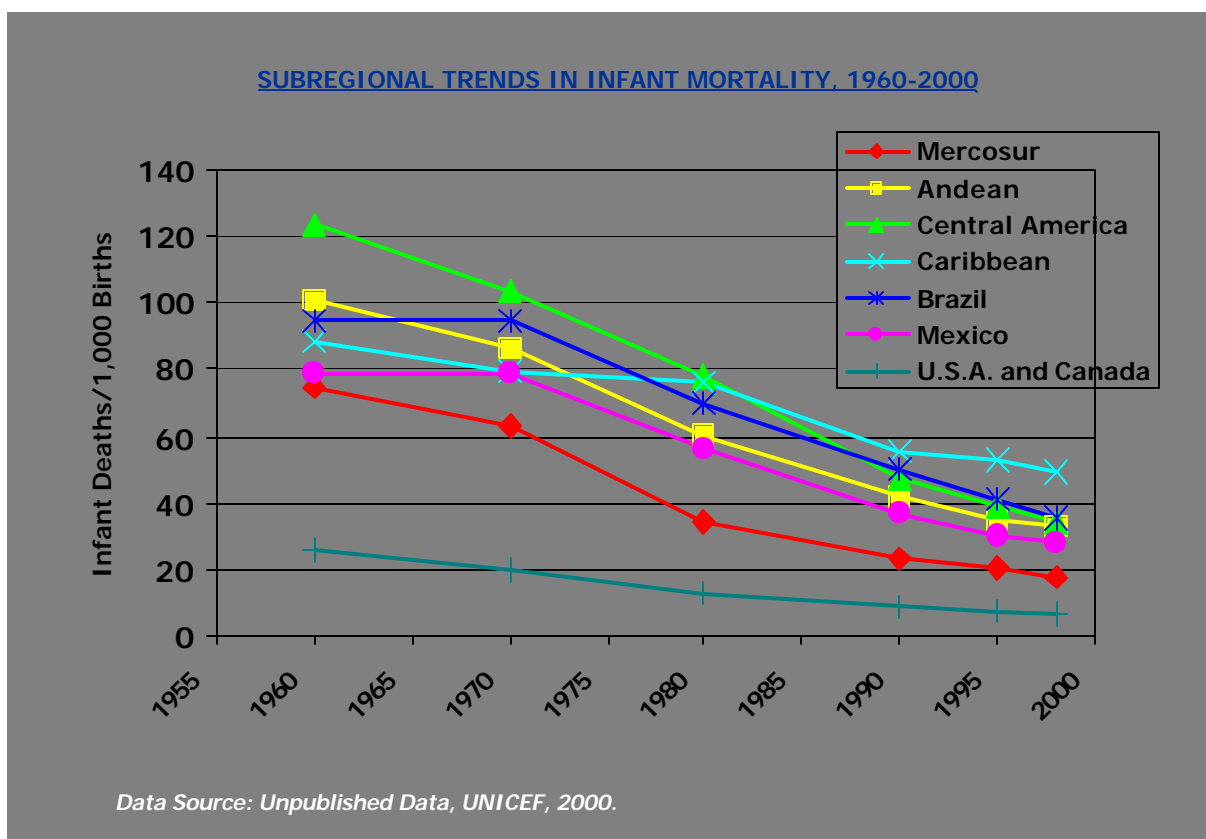
## Infant Mortality

### Goal

Reduce infant and under-five child mortality by one-third or to 50 and 70 per 1,000 live births, respectively, whichever is lower.

### Definition

The infant mortality rate is the number of deaths among children before their first birthday in a given year per 1,000 live births in that same year. The infant mortality rate reflects the results of child survival interventions such as safe deliveries and proper postnatal care.



- Over the last 40 years, the subregions with historically high infant mortality, such as Central America, Brazil, and Andean South America, have reduced it as much as 70 percent.
- Central America has seen the sharpest drop in infant mortality rates over the last 40 years. The Caribbean has made the slowest progress in reducing infant mortality rates.
- Infant mortality rates fell in all countries of the Americas in the 1990s. Chile, Cuba, El Salvador, and Guatemala had the largest declines in infant mortality, exceeding 30 percent.
- As of 1998, Chile and Cuba had achieved the goals of the World Summit for Children. Another five countries (El Salvador, Guatemala, Honduras, Nicaragua, and Peru) had achieved a 25 percent decrease in infant mortality rates.

Figure 13

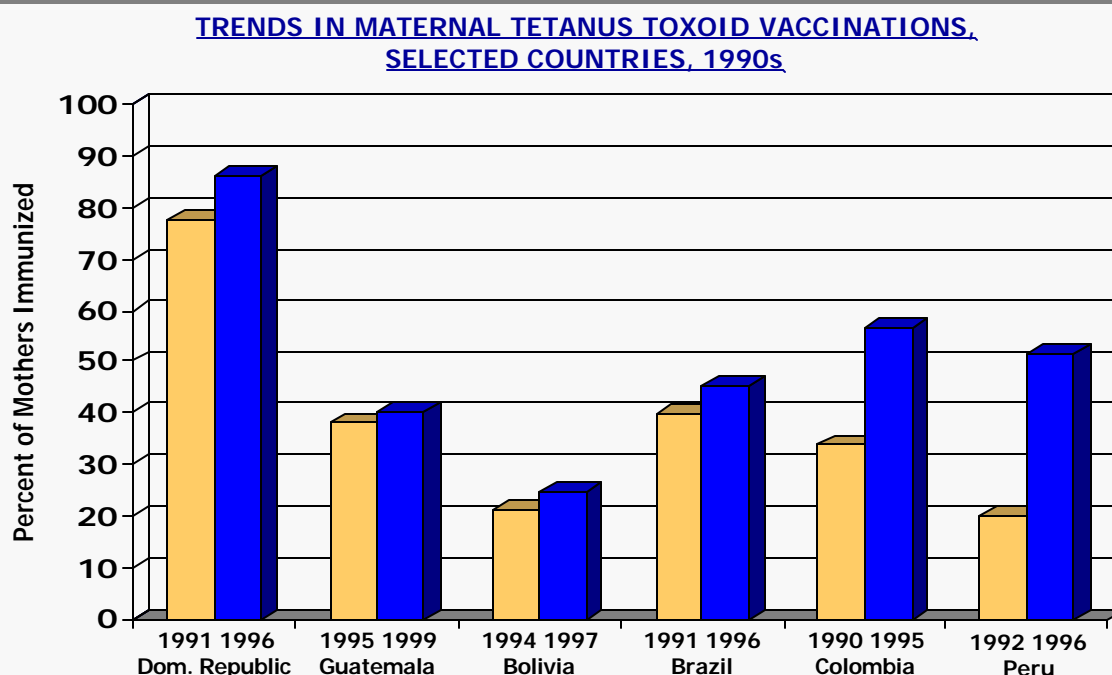
## Infant Mortality: Neonatal Tetanus

### Goal

Virtual elimination of neonatal tetanus as a public health problem.

### Definition

The percentage of mothers receiving at least two doses of tetanus toxoid vaccinations before childbirth is an indicator of progress toward eliminating neonatal tetanus.



*Data Source: Demographic and Health Surveys, Macro International.*

- In all countries with available DHS data for two years during the 1990s, tetanus toxoid vaccination coverage among pregnant women increased. According to the World Health Organization, neonatal tetanus was eliminated in all but two of the developing countries in the Americas.
- Colombia and Haiti are the only two countries in the region that have not declared the elimination of neonatal tetanus.
- The number of reported cases of neonatal tetanus dropped from 1,208 in 1990 to 246 in 1997 (estimated notification efficiency of 11 percent). The number of reported deaths decreased 82 percent during the same time period, from 8,300 to 1,500. The majority of this progress occurred in Brazil, where the number of deaths from neonatal tetanus decreased from an estimated 5,900 in 1990 to 100 in 1997.

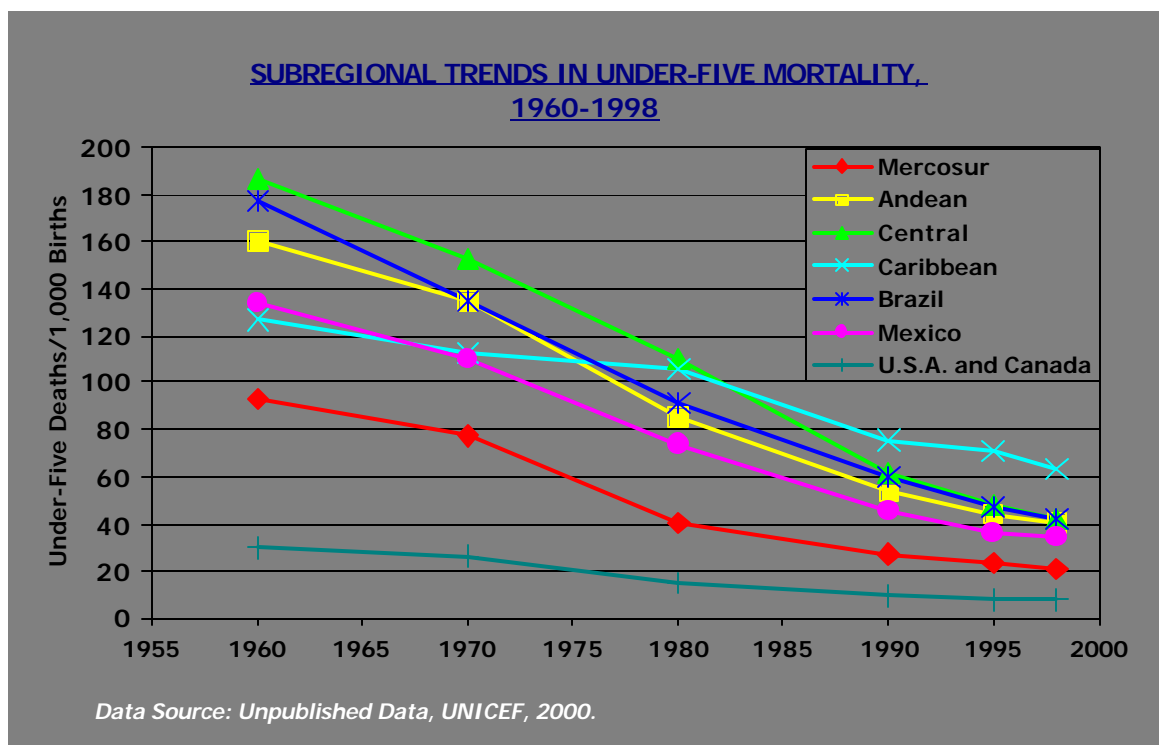
## Under-Five Mortality

### Goal

Reduce infant and under-five child mortality by one-third or to 50 and 70 per 1,000 live births, respectively, whichever is lower.

### Definition

The under-five mortality rate is the number of deaths among children under age 5 in a given year per 1,000 live births in that same year. The reduction of under-five mortality reflects the results of child survival interventions such as safe deliveries, proper postnatal care, and comprehensive immunization programs.



- Over the last 40 years, the subregions with historically high under-five mortality, such as Central America, Brazil, and Andean South America, have been able to reduce it by as much as 75 percent.
- In the 1990s, all subregions in the Americas continued to reduce under-five mortality. The United States and Canada and the Mercosur subregions continued to have the lowest levels.
- Cuba, Chile, El Salvador, and Guatemala attained the goals of the World Summit for Children by 1998.
- Bolivia, Brazil, Honduras, Jamaica, Mexico, Nicaragua, and Peru also made great strides toward the goal by reducing under-five mortality by more than 25 percent between 1990 and 1998.

Figure 15

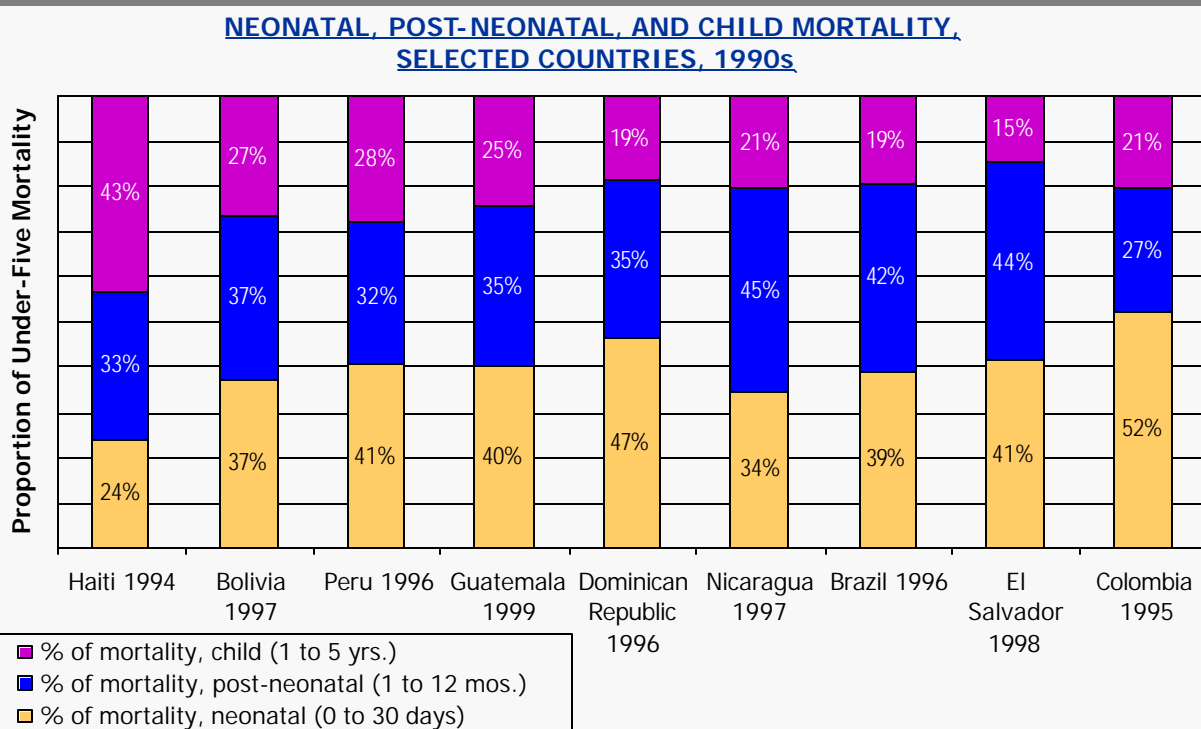
## Under-Five Mortality

### Goal

Reduce infant and under-five child mortality by one-third or to 50 and 70 per 1,000 live births, respectively, whichever is lower.

### Definition

The under-five mortality rate is the number of deaths among children under age 5 in a given year per 1,000 live births in that same year. Components of under-five mortality include neonatal mortality (0 to 30 days), post-neonatal mortality (1 to 12 months), and child mortality (1 to 5 years). Examining under-five mortality by the proportions of these components can reveal useful information about the distribution and effectiveness of interventions. Certain interventions have more effect on one mortality component than another, and knowing the relationships among components can help direct resources to achieve greater reductions in under-five mortality.



Data Source: Demographic and Health Surveys, Macro International; El Salvador National Family Health Survey, CDC, 1998.

- Countries are ranked from left to right by under-five mortality. Haiti, with 130 deaths per 1,000 live births, has the highest under-five mortality among these countries, and Colombia, with 30, has the lowest.
- In these countries, neonatal mortality tends to make a greater contribution to under-five mortality as under-five mortality decreases. In this graph, the contribution made by neonatal mortality to the whole varies from 24 percent in Haiti to 52 percent in Colombia.
- The proportion of post-neonatal mortality (mortality between 1 and 12 months of age) also tends to follow this pattern, i.e., increase as under-five mortality decreases. Colombia, however, is an anomaly among these countries.
- Child mortality (mortality between 1 and 5 years of age) tends to make a smaller contribution to under-five mortality as under-five mortality decreases. For example, child mortality accounts for 43 percent of under-five mortality in Haiti but less than 20 percent in Brazil, El Salvador, and the Dominican Republic.

Figure 16

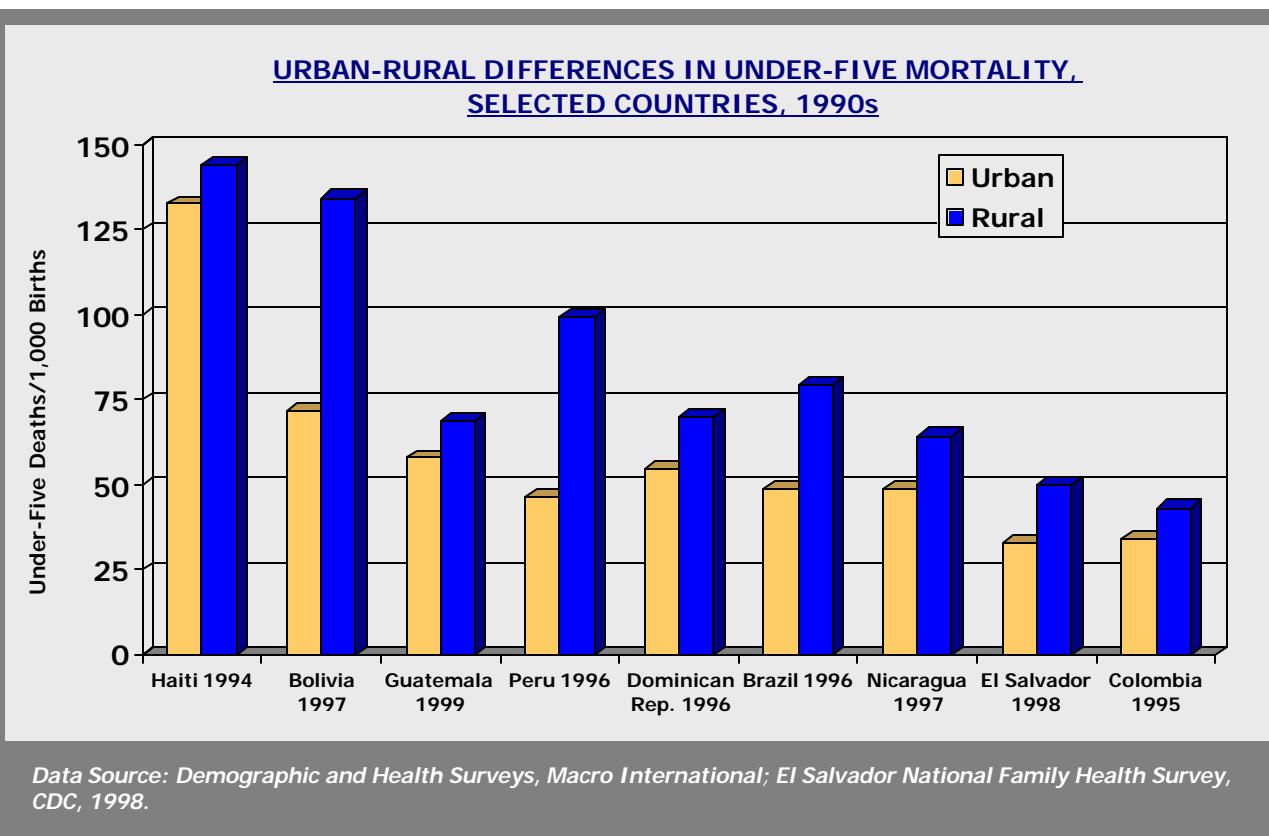
## Under-Five Mortality

### Goal

Reduce infant and under-five child mortality by one-third or to 50 and 70 per 1,000 live births, respectively, whichever is lower.

### Definition

The under-five mortality rate is the number of deaths among children under age 5 in a given year per 1,000 live births in that same year. High-quality health care services are often concentrated in urban areas where political and economic elites live. The increased availability of services may be reflected in relatively low mortality rates.



- Rural under-five mortality rates exceed urban rates by at least 10 deaths per 1,000 live births in every country.
- Both Peru and Bolivia show substantially higher rates of under-five mortality in rural areas than in urban areas. The urban under-five mortality rate in Peru is less than half the rural rate.
- Haiti, Bolivia, and Colombia are contrasting cases. Haiti, with high mortality, has a small urban-rural disparity. Bolivia has achieved great reductions in under-five mortality but has a large urban-rural disparity. Colombia, with a relatively low under-five mortality rate, has the smallest urban-rural disparity among the countries shown.

Figure 17

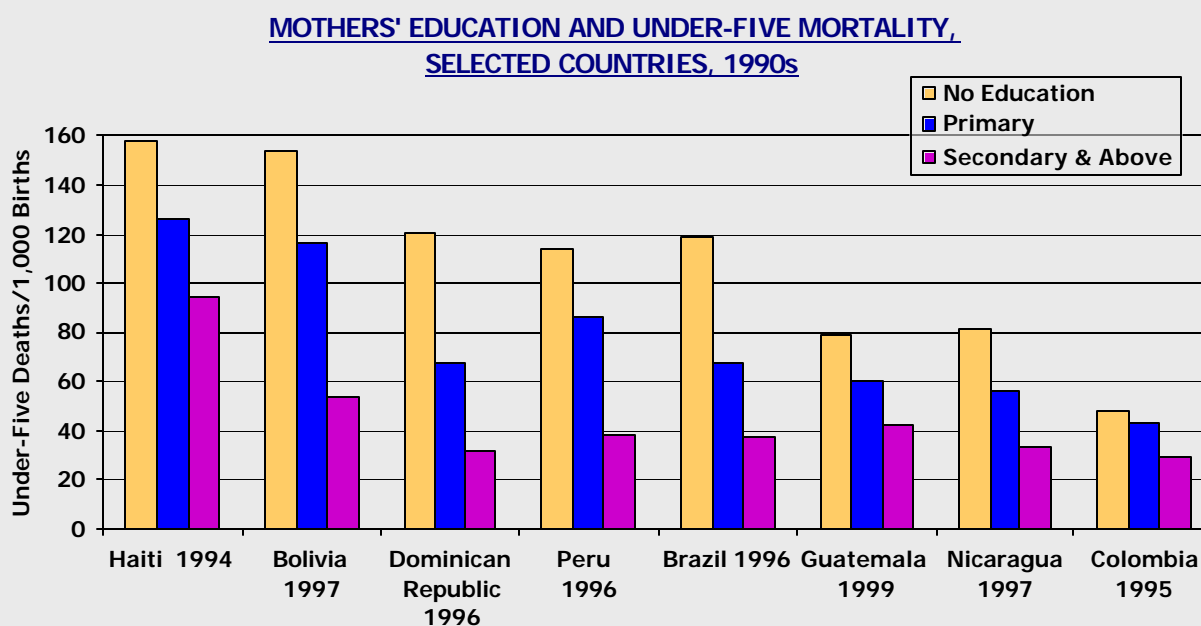
## Under-Five Mortality

### Goal

Reduce infant and under-five child mortality by one-third or to 50 and 70 per 1,000 live births, respectively, whichever is lower.

### Definition

The under-five mortality rate is the number of deaths among children under age 5 in a given year per 1,000 live births in that same year. Higher levels of education may be associated with lower levels of under-five mortality for several reasons. First, women with more education may have more access to high-quality medical services. Second, school curricula often include health components, which may lead to increased recognition of symptoms and more timely decisions to seek care. Third, better-educated women may be more receptive to public health messages and may have more ability to pay for health care services.



Data Source: Demographic and Health Surveys, Macro International.

- In most Latin American and Caribbean countries, the children of well-educated women have relatively low mortality rates. However, significant differences exist among countries.
- The difference between the under-five mortality rates for children of well-educated women and children of women with no education can be as great as 90 deaths per 1,000 live births.
- The difference in under-five mortality for children of well-educated women and women with no schooling is large, except in Colombia. The largest proportional differences are in the countries with moderate (50 to 100) under-five mortality rates.
- Among the countries shown here, striking differences in under-five mortality exist within the educational groupings. Therefore, education alone is not solely responsible for reducing under-five mortality.

Figure 18

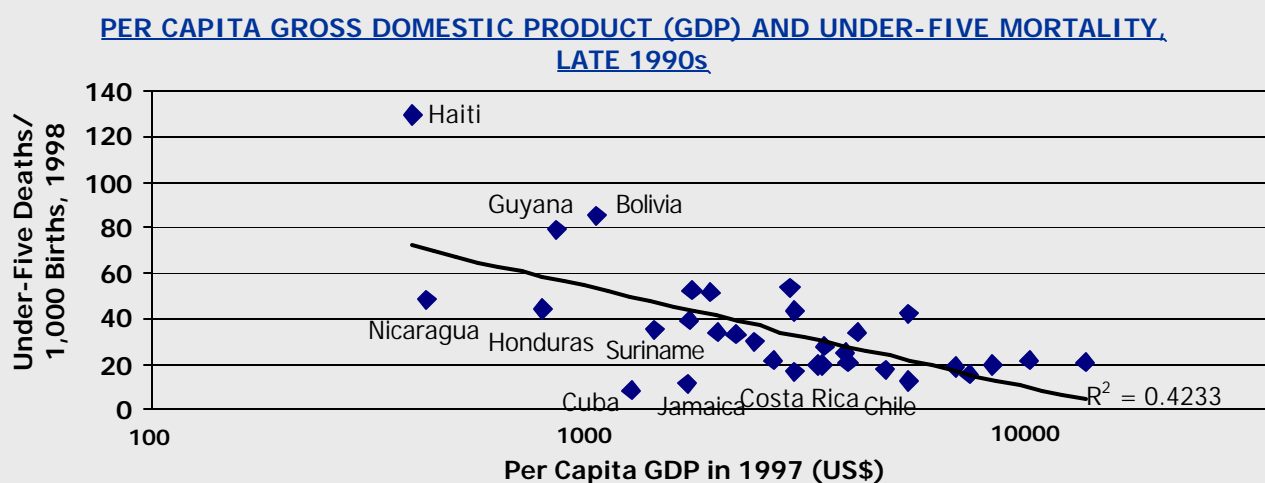
## Under-Five Mortality

### Goal

Reduce infant and under-five child mortality by one-third or to 50 and 70 per 1,000 live births, respectively, whichever is lower.

### Definition

The under-five mortality rate is the number of deaths among children under age 5 in a given year per 1,000 live births in that same year. Per capita Gross Domestic Product (GDP) is the gross domestic product of a country divided by the number of people in a country. In general, wealthy countries perform better than poor countries on almost all development indicators. Greater wealth can finance better health services leading to better maternity care and better well-baby care. At low levels of per capita GDP, relatively small increases in income are associated with great increases in health care. The chart below presents per capita GDP on a logged scale to present this fact.



Data Source: *The State of the World's Children*, UNICEF, 2000; *Unpublished Data*, UNICEF, 2000.

- In general, countries with higher per capita GDP have lower under-five mortality. However, the influence of increased per capita GDP decreases with higher per capita GDP, as indicated by the log scale.
- The trendline indicates that about 42 percent of the differences in under-five mortality is correlated with per capita GDP. The correlation shown here does not imply causality, only that countries with higher per capita GDP often have lower under-five mortality rates.
- Several countries lie far below the trendline, indicating that it is possible, as in Cuba and Jamaica, to achieve decreases in under-five mortality without large increases in per capita GDP.
- Countries below and above the trendline offer interesting comparisons. Nicaragua and Haiti have similar per capita GDP levels, but under-five mortality in Nicaragua is less than half that of Haiti. Cuba, with only a slightly higher per capita GDP than Bolivia, has a much lower under-five mortality rate.

Figure 19

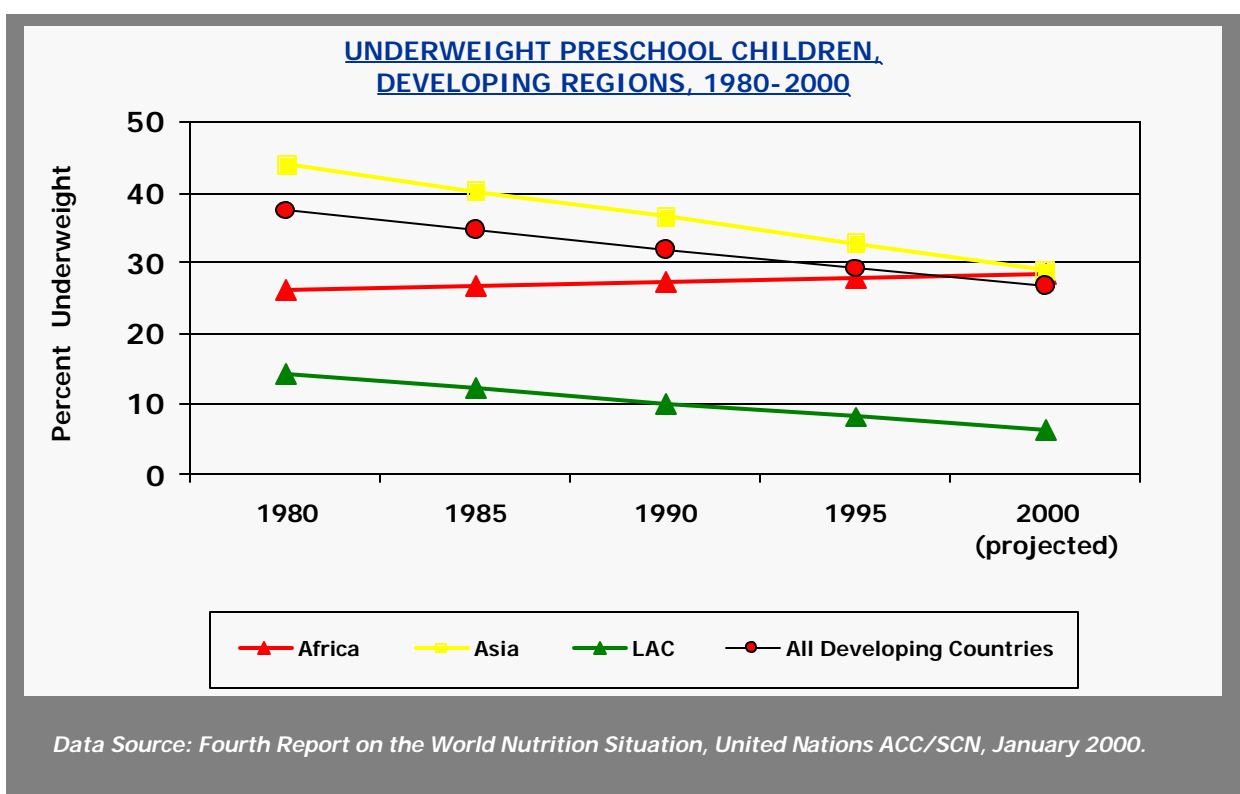
## Diet and Nutrition: Malnutrition (Weight for Age)

### Goal

Reduce by half severe and moderate malnutrition among children under 5.

### Definition

One estimate of malnutrition is the percentage of children under age 5 who are underweight. This is defined as the percentage of children under 5 whose weight for age is two or more standard deviations below the median of a reference population. Weight for age is commonly used in clinical settings for continuous assessment of nutritional progress and growth.



- The percentage of underweight preschool children has decreased in all developing regions of the world except Africa since 1980. The Latin America and Caribbean region has the lowest percentage of all developing regions.
- In all developing countries, nearly 150 million preschool-aged children are estimated to be underweight. One hundred eight million of these children live in Asia, 38 million in Africa, and just over 3 million in Latin America and the Caribbean.

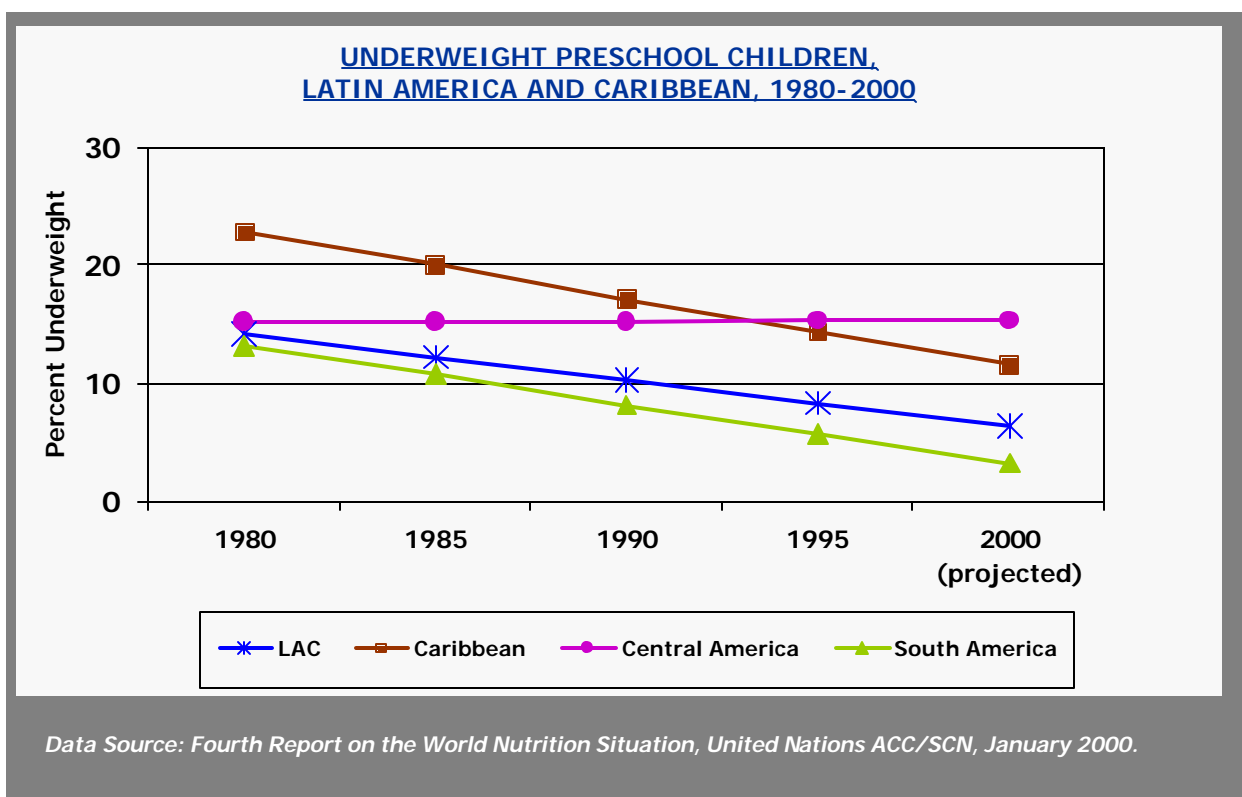
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### Goal

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### Definition

One estimate of malnutrition is the percentage of children under age 5 who are underweight. This is defined as the percentage of children under 5 whose weight for age is two or more standard deviations below the median of a reference population. Weight for age is commonly used in clinical settings for continuous assessment of nutritional progress and growth.



- Within Latin America and the Caribbean, South America was the only subregion to achieve the goal of reducing underweight levels by half between 1990 and 2000. In 1990, 8.2 percent of children were underweight, while only 3.2 percent are estimated to be underweight in 2000.
- The Caribbean subregion also made progress in reducing underweight levels in the last decade. In 1990, 17.2 percent of preschool-aged children were underweight. In 2000, 11.5 percent are estimated to be underweight.
- Central America has not progressed in reducing underweight levels. The percentage of preschool-aged children in the subregion who are underweight has slightly increased, from 15.1 percent in 1980 to 15.4 percent in 2000.

Figure 21

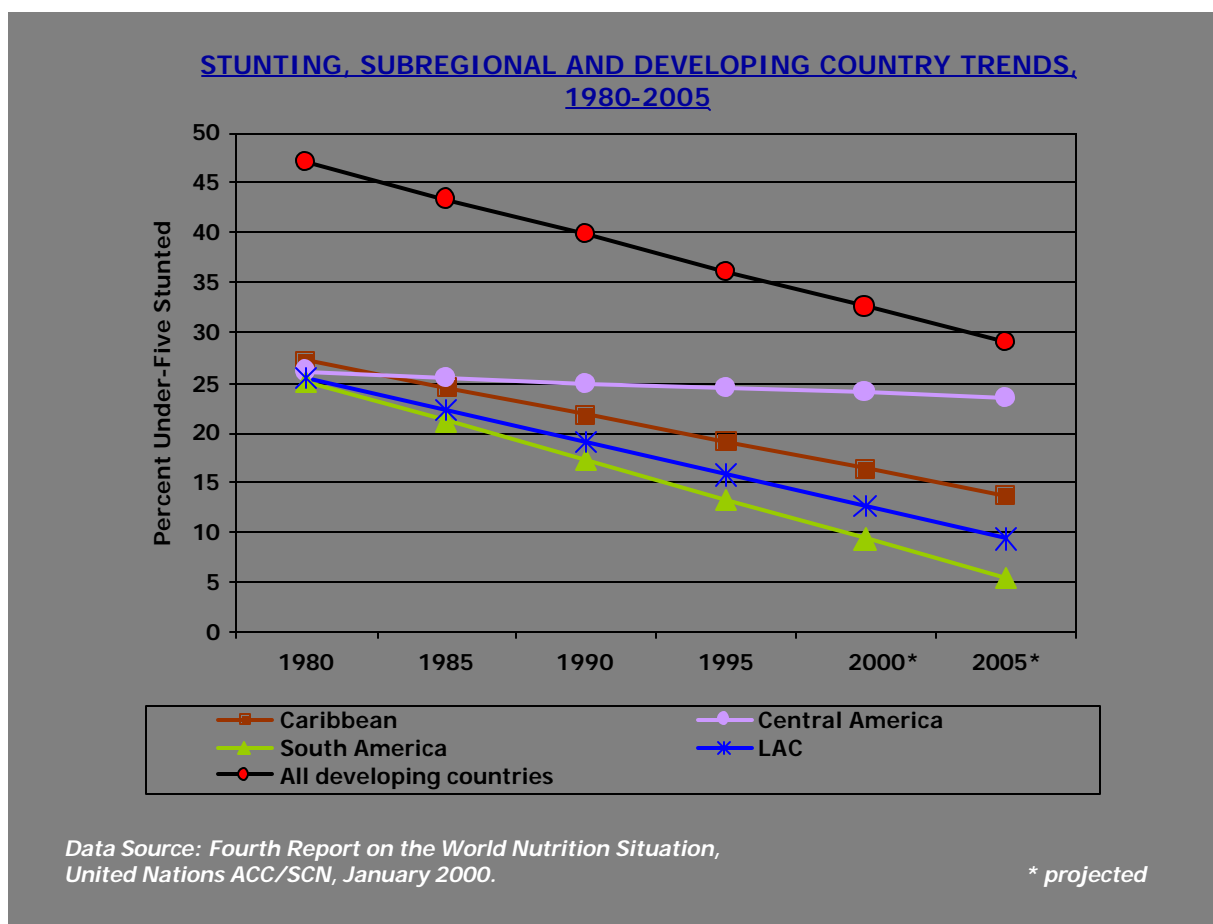
## Diet and Nutrition: Malnutrition (Stunting)

### Goal

Reduce by half severe and moderate malnutrition among children under 5.

### Definition

The prevalence of stunting is measured by estimating the percent age of the population 6 months to 59 months old with a height-to-age (H/A) ratio more than two standard deviation units below the reference population. Stunting reflects chronic malnutrition or past nutritional history, not current nutritional status.



- In developing countries, there has been a large decline in the prevalence of stunting, from 47.1 percent in 1980 to 32.5 percent at present.
- The Latin America and Caribbean region has had a lower prevalence of stunting than other developing regions. Latin America and the Caribbean have achieved substantial improvements in this area in the past 20 years. The regional prevalence today is estimated at 12.6 percent, although disparities persist between rural and urban populations and by levels of education.
- South America has had great success in reducing chronic malnutrition. Projections suggest that stunting can be virtually eliminated in South America by 2005.
- Central America has achieved the least progress over the past two decades. Its current estimated prevalence of stunting (24 percent) is similar to that of developing countries in other regions of the world.

Figure 22

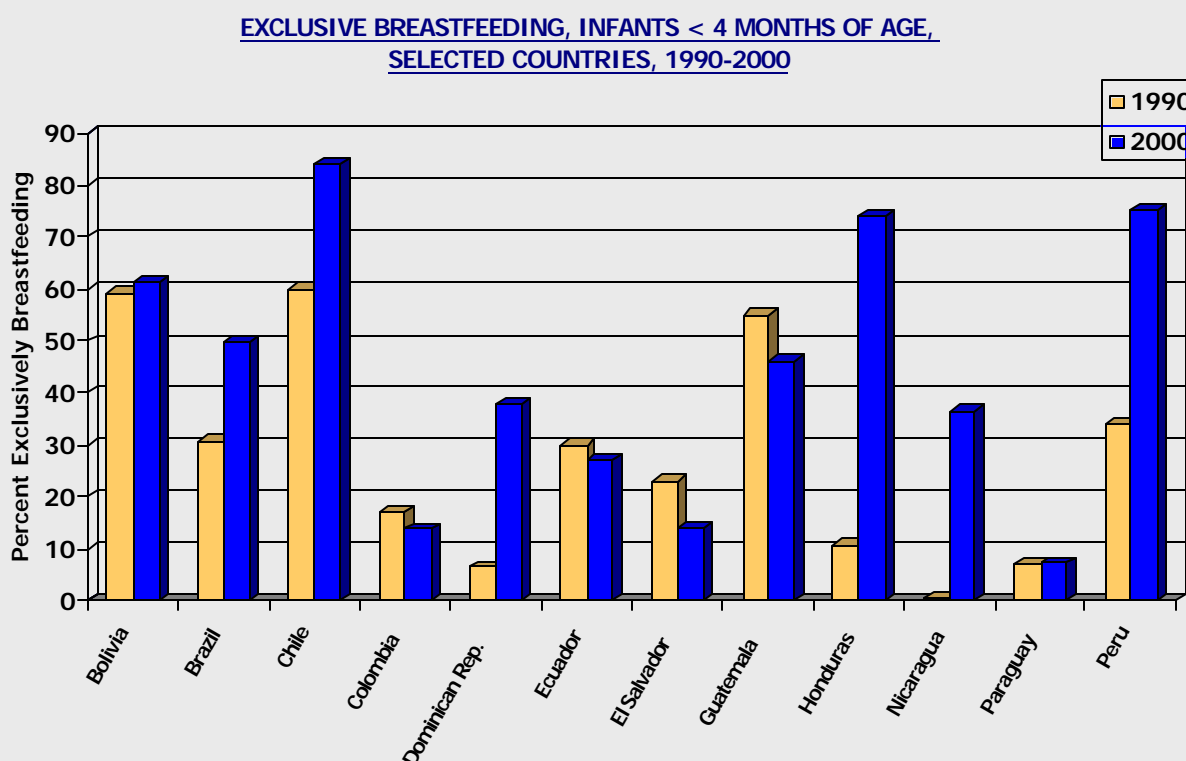
## Diet and Nutrition: Exclusive Breastfeeding

### Goal

Ensure exclusive breastfeeding during the first six months of life and continue breastfeeding, along with complementary food, up to the second year.

### Definition

A measure of exclusive breastfeeding is the proportion of infants less than 4 months of age who receive no foods or liquids other than breast milk. Breast milk contains all the nutrients an infant requires, along with maternal antibodies to help build the infant's immune system and prevent illness and death. It is important to initiate breastfeeding immediately after delivery and continue exclusive breastfeeding for six months.



Data Source: Unpublished Data, UNICEF, 2000.

- The extent of exclusive breastfeeding varies greatly throughout the region. Levels in Chile, Peru, Honduras, and Bolivia exceed 60 percent, while in Paraguay, Colombia, and El Salvador, levels remain below 20 percent.
- Over the last decade, exclusive breastfeeding has increased considerably in six countries – Brazil, Chile, Dominican Republic, Honduras, Nicaragua, and Peru. Decreases have occurred in Colombia, Ecuador, El Salvador, and Guatemala.
- The Latin America and Caribbean region (at 39 percent) ranks fourth out of the five developing regions in exclusive breastfeeding. The East Asia/Pacific region has the highest percentage (59 percent), followed by South Asia (45 percent), Middle East and North Africa (41 percent), and Africa (31 percent).

Figure 23

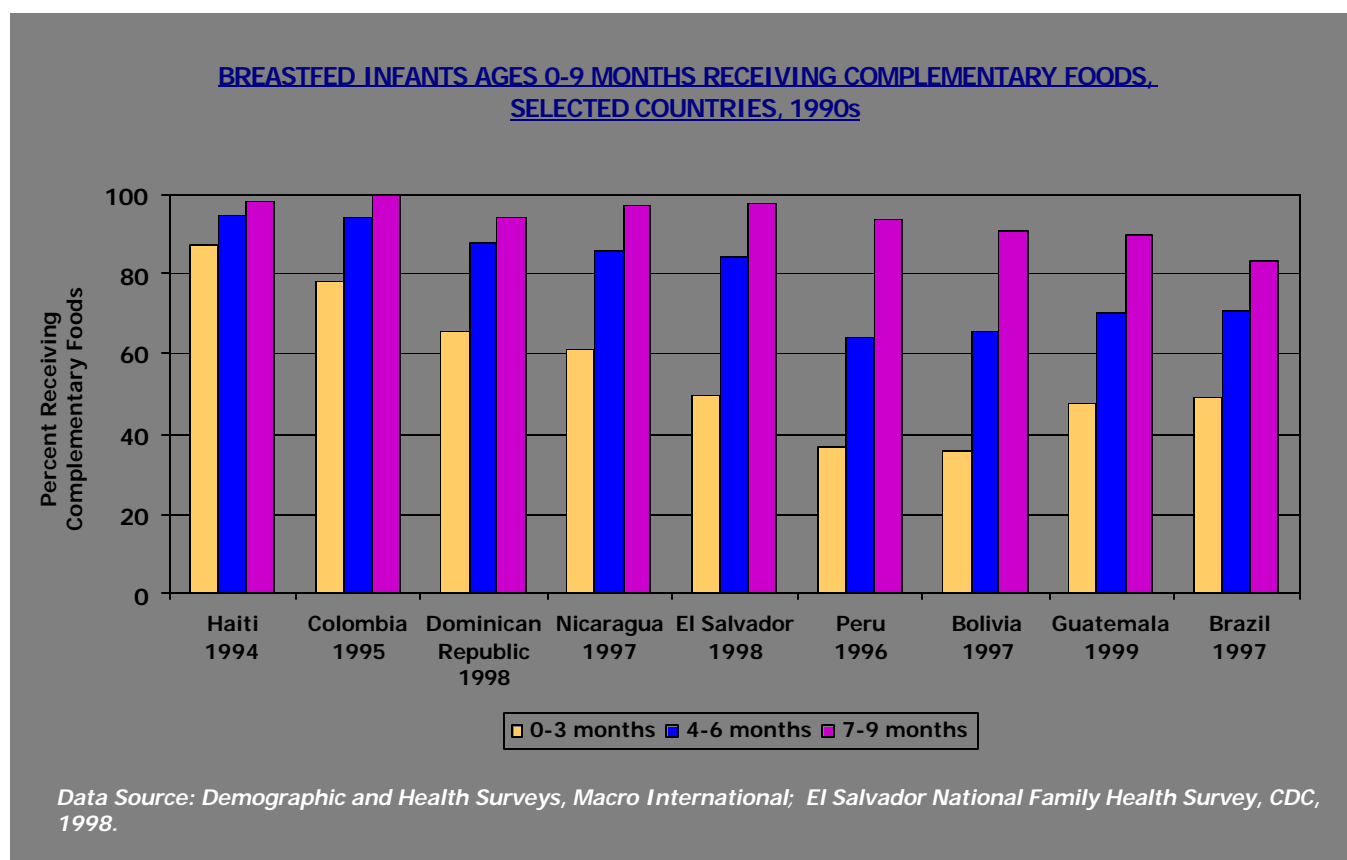
## Diet and Nutrition: Complementary Feeding

### Goal

Ensure exclusive breastfeeding during the first six months of life and continue breastfeeding, along with complementary food, up to the second year.

### Definition

"Breastfed infants receiving complementary feeding" are infants ages 0 to 9 months who, while still being breastfed, receive other liquids (excluding water) and/or foods, including other milks, grains, tubers, and meats. In order to achieve adequate growth and reduce the risk of morbidity from infectious diseases, UNICEF and the World Health Organization recommend that infants exclusively breastfeed during their first six months and continue to breastfeed beyond that period with appropriate complementary foods.



- Theoretically, initiation of complementary foods should begin at 6 months of age. In this graphic, a large increase in complementary feeding between months 4 through 6 and months 7 through 9 would indicate that this is occurring. Bolivia and Peru come closest to this ideal, although even in these countries two-thirds of breastfed 6-month-olds have previously initiated weaning. In other countries, the proportions of 6-month-olds already receiving complementary foods are much higher.
- Haiti (87.6 percent) and Colombia (78.4 percent) have the highest rates of complementary feeding of infants less than 3 months old. In these and other countries, "complementary foods" before 4 months of age tend to be other types of milk, with semisolid foods being introduced when infants are between 4 and 6 months old.

Figure 24

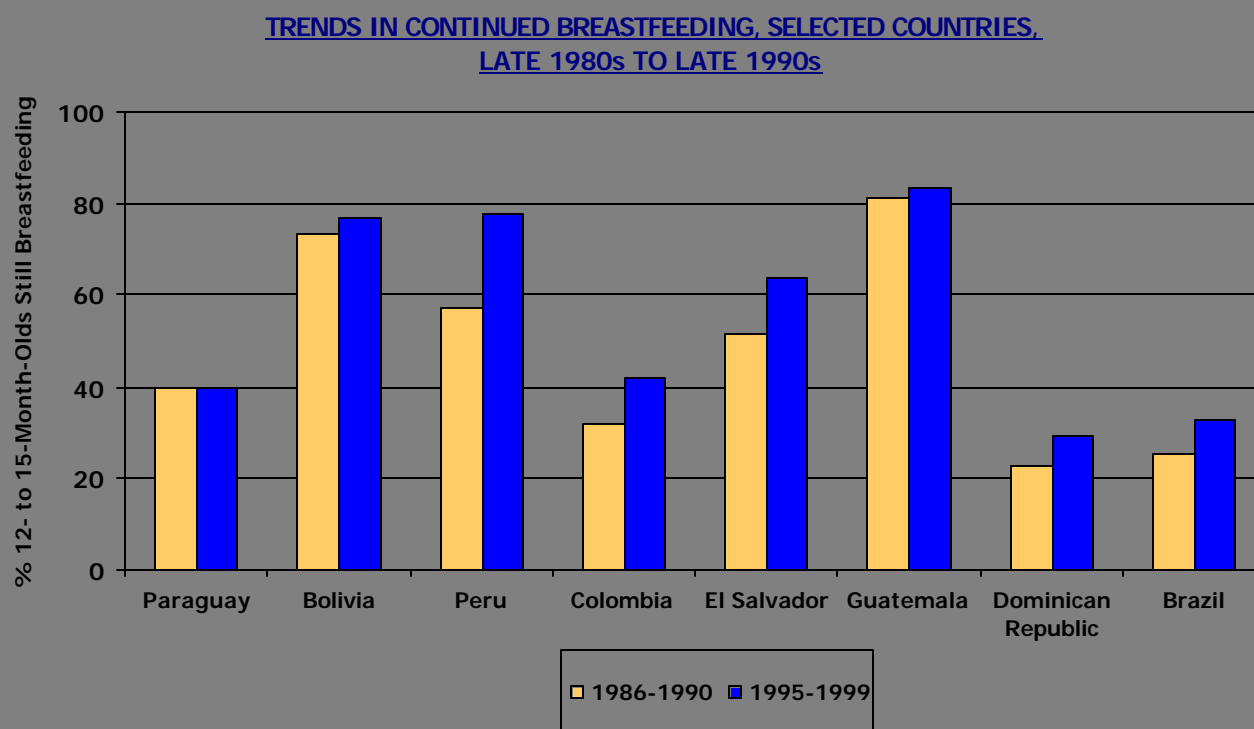
## Diet and Nutrition: Continued Breastfeeding

### Goal

Ensure exclusive breastfeeding during the first six months of life and continue breastfeeding, along with complementary food, up to the second year.

### Definition

"Continued breastfeeding" is measured as the percentage of children ages 12 months to 15 months receiving breast milk. These children are no longer exclusively breastfed and should be receiving adequate nutritional weaning foods to ensure proper growth and development.



*Data Source: Demographic and Health Surveys, Macro International.*

- Data from Latin America and the Caribbean on continued breastfeeding are limited. Only eight countries, containing 54 percent of the regional infant population, are represented in the data presented here.
- Among the countries shown here, continued breastfeeding rates range from 29.5 percent in the Dominican Republic to 83.2 percent in Guatemala. Regional data for the 1990s indicate that 46.4 percent of 12- to 15-month-old children in Latin America and the Caribbean continue to receive breast milk.
- Except for Paraguay (where a slight decrease occurred), each of the countries shown had an increase in the rate of continued breastfeeding from the 1980s to the 1990s. Peru experienced the largest increase, from 56.9 percent to 77.5 percent.
- In world comparisons of 1990s data, the rate of continued breastfeeding in Latin America and the Caribbean (46.4 percent) is considerably lower than the rates in Africa (88 percent), South Asia (88 percent), and the Middle East and North Africa (53 percent).

Figure 25

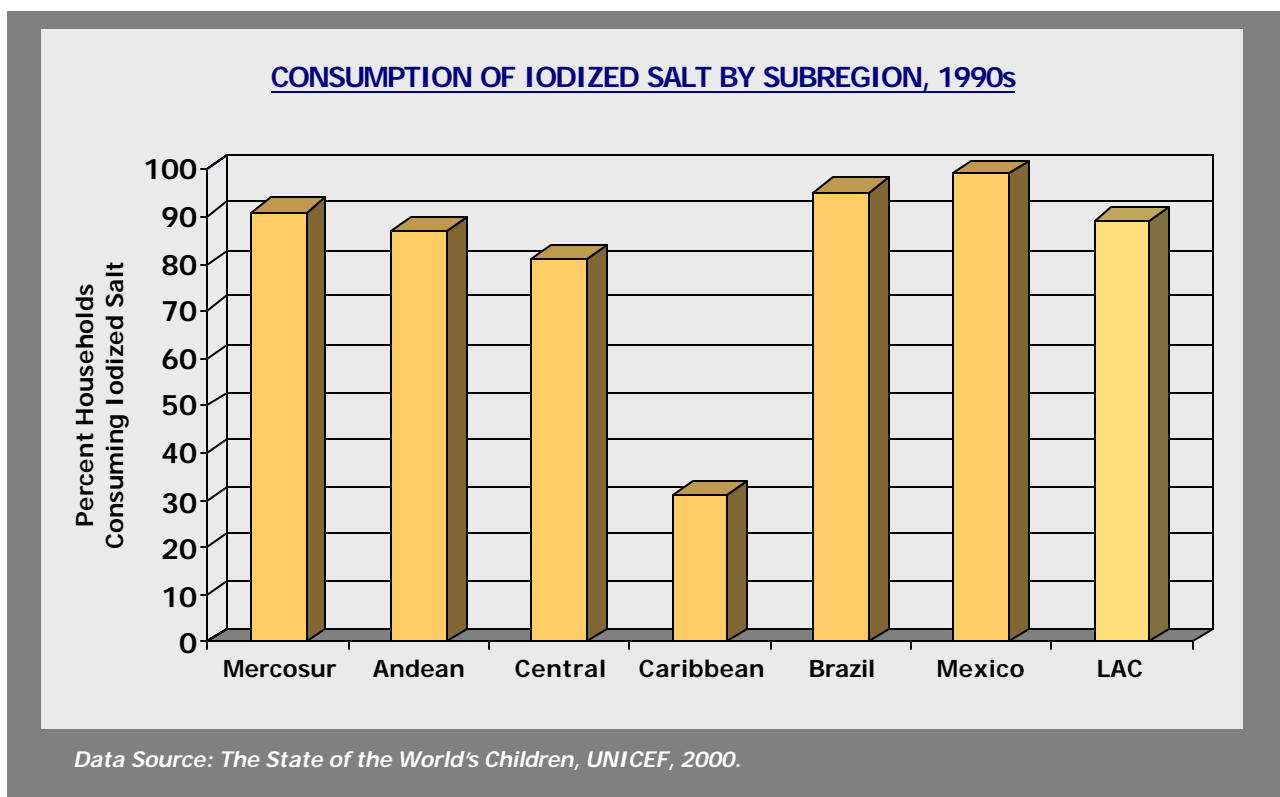
## Diet and Nutrition: Iodized Salt

### Goal

Virtual elimination of disorders related to iodine deficiencies. Promote the 100 percent iodizing of salt for human and animal consumption and increase to 90 percent or higher the proportion of families that consume properly iodized salt, including the inhabitants of rural areas, in particular in endemic regions.

### Definition

Iodized salt consumption is measured by the percentage of households consuming iodized salt. Iodine is an essential micronutrient important in the prevention of mental and physical disorders in both children and adults.



- The region as a whole is closing in on its goal of 90 percent iodized salt consumption by 2000. In the 21 countries for which data are available, 89 percent of households consume iodized salt.
- The levels of iodized salt consumption in Mexico (99 percent), Brazil (95 percent), and Mercosur (91 percent) have exceeded the goal. Andean South America and Central America, at 87 percent and 81 percent respectively, are approaching the goal.
- Despite the relatively low use of iodized salt in the Caribbean subregion, a few Caribbean countries have very high rates of use. In Jamaica, for example, 100 percent of households consume iodized salt.
- Over 410 million people live in the 12 countries where iodized salt consumption levels reach 90 percent.
- In spite of the gains made in this area, 65 million people in the region still are not consuming iodized salt.

## Diet and Nutrition: Vitamin A Deficiency

### Goal

Virtual elimination of vitamin A deficiency and its consequences, including blindness.

### Definition

Vitamin A deficiency (VAD) prevalence, for both clinical VAD and subclinical VAD, is the estimated number of cases per 1,000 persons. Clinical VAD is diagnosed as a series of progressive symptoms of ocular/functional indicators (night blindness, corneal xerosis/ulceration, and corneal scars). Biochemical indicators, such as serum retinol < 0.70 µmol/L, are present before clinical indicators appear and can be used to estimate the prevalence of subclinical VAD in the population.

#### PREVALENCE (%) OF VITAMIN A DEFICIENCY, LAC, 1985-1995

LAC Subregions	Clinical VAD		Subclinical VAD	
	1985	1995	1985	1995
<b>Mercosur</b>				
Chile	0.1	0.1	6.4	5.8
Paraguay	0.2	0.2	9.3	7.5
Uruguay	0.2	0.1	7.5	6.2
<b>Andean</b>				
Bolivia	0.9	0.4	19.7	12.3
Colombia	0.2	0.2	8.4	7.9
Ecuador	0.4	0.3	12.2	9.8
Peru	0.5	0.3	13.9	10.7
Venezuela	0.2	0.1	7.7	6.9
<b>Central America</b>				
Costa Rica	0.1	0.1	6.2	5.7
El Salvador	0.5	0.2	13.7	8.8
Guatemala	0.5	0.3	14.3	10.0
Honduras	0.4	0.2	12.4	8.7
Nicaragua	0.5	0.2	14.4	9.4
Panama	0.2	0.1	7.4	6.6
<b>Caribbean</b>				
Cuba	0.1	0.1	6.2	5.8
Dominican Republic	0.4	0.2	12.4	8.3
Haiti	1.2	0.7	22.5	16.5
Jamaica	0.1	0.1	6.6	6.0
<b>Other</b>				
Brazil	0.4	0.3	11.9	9.9
Mexico	0.3	0.2	9.7	8.0

Source: *Progress in Controlling Vitamin A Deficiency, Micronutrient Initiative, UNICEF, Tulane University, 1998.*

- Blood serum retinol levels of < 0.70 µmol/L in more than 5 percent of the population constitute a public health problem. In 1995, 20 of the countries shown here exceeded this prevalence level for subclinical VAD. The prevalence of low serum retinol had declined, however, since the mid-1980s.
- The urgency of rapidly reducing VAD has been dramatized by intervention trials indicating that improving vitamin A status in regions of high VAD can substantially help reduce mortality rates.
- VAD in the Mercosur subregion seems to be of less public health significance than in the other Latin America and Caribbean regions. However, improvement rates tend to be lower in low prevalence regions.

Figure 27

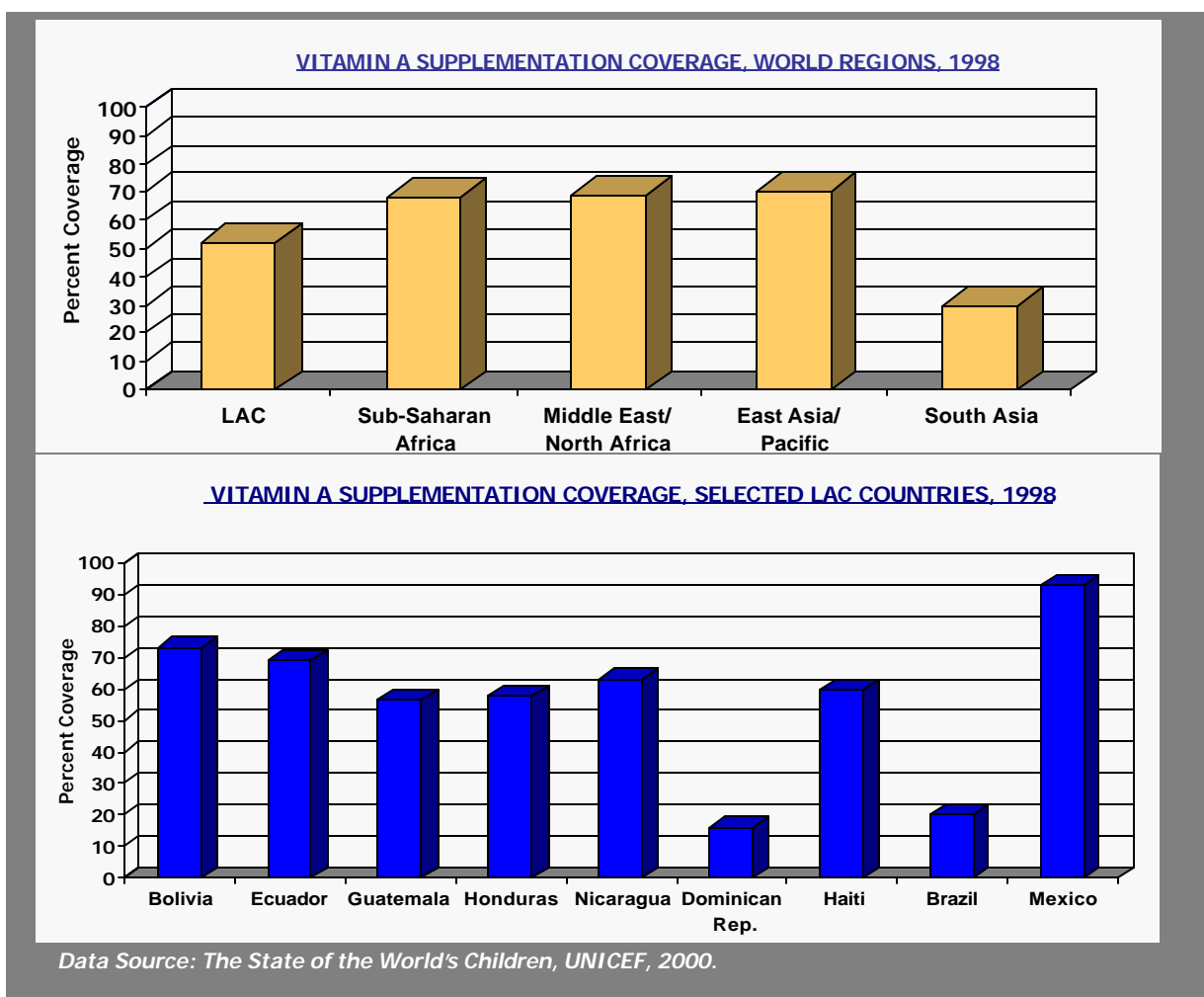
## Diet and Nutrition: Vitamin A Supplementation

### Goal

Virtual elimination of vitamin A deficiency and its consequences, including blindness.

### Definition

Vitamin A supplementation coverage is the percentage of children ages 6 months to 59 months who have received a high-dose vitamin A capsule in the past six months. Regular vitamin A supplementation can reduce vitamin A deficiency and its sequelae. In areas where vitamin A deficiency is endemic, high-dose vitamin A can be administered to children between 6 months and 9 months of age at the time of routine immunizations, or mothers can be given a single large dose of vitamin A within four weeks of delivery to increase the amount of vitamin A in breast milk. Supplements can also be given to children between the ages of 1 and 5 years.



- In 1998, the coverage rate for vitamin A supplementation in Latin America and the Caribbean was lower than the rates in sub-Saharan Africa, the Middle East and Northern Africa, and East Asia and the Pacific. However, the magnitude of vitamin A deficiency in Latin America and the Caribbean is much smaller – 24 percent clinical prevalence in 1995, compared to a total developing country prevalence of 63 percent.
- In the nine countries shown, coverage rates vary from a high of 93 percent in Mexico to a low of 16 percent in the Dominican Republic. These two countries nonetheless have similar subclinical levels of VAD, illustrating the effect of other factors (such as diet and food fortification) besides capsule distribution.
- Fortifying food with vitamin A is becoming a leading intervention. Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Honduras, and Nicaragua fortify sugar; Haiti, dried mangos; Mexico, a chocolate milk drink; and Venezuela, maize flour.

Figure 28

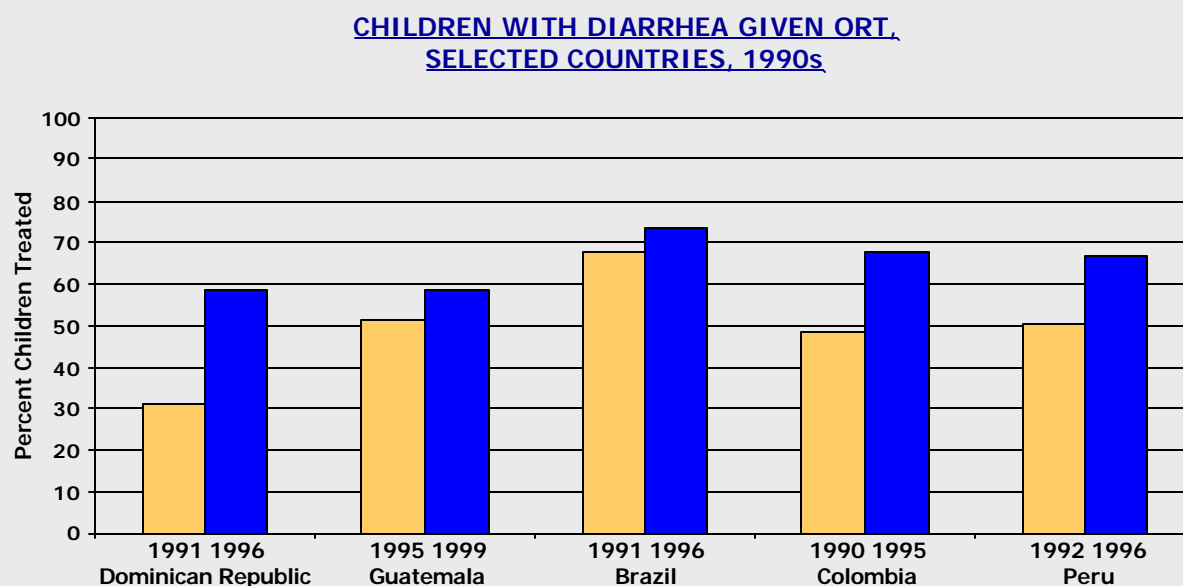
## Early Childhood Diseases: Treatment of Diarrhea

### Goal

Reduce deaths from acute diarrheal disease (ADD) by 50 percent. Expand training and services and campaigns to increase effective coverage of oral rehydration therapy (ORT) to 90 percent or more of ADD cases.

### Definition

"Treatment of diarrhea" is defined as the percentage of children under age 5 with diarrhea who receive ORT, which can be administered through oral rehydration solution, a recommended home treatment, or increased fluids. Severe diarrhea is a common cause of death in infants and young children. Prompt replenishment of fluids can prevent many deaths caused by dehydration.



*Data Source: Demographic and Health Surveys, Macro International.*

- All of the countries shown here increased the percentage of children receiving treatment for diarrheal diseases. None, however, achieved the goal of 90 percent coverage.
- Production of oral rehydration solution (ORS) is also increasing. According to UNICEF, 11 Latin American and Caribbean nations have increased ORS production. Two of them, Cuba and Mexico, produce enough for export.

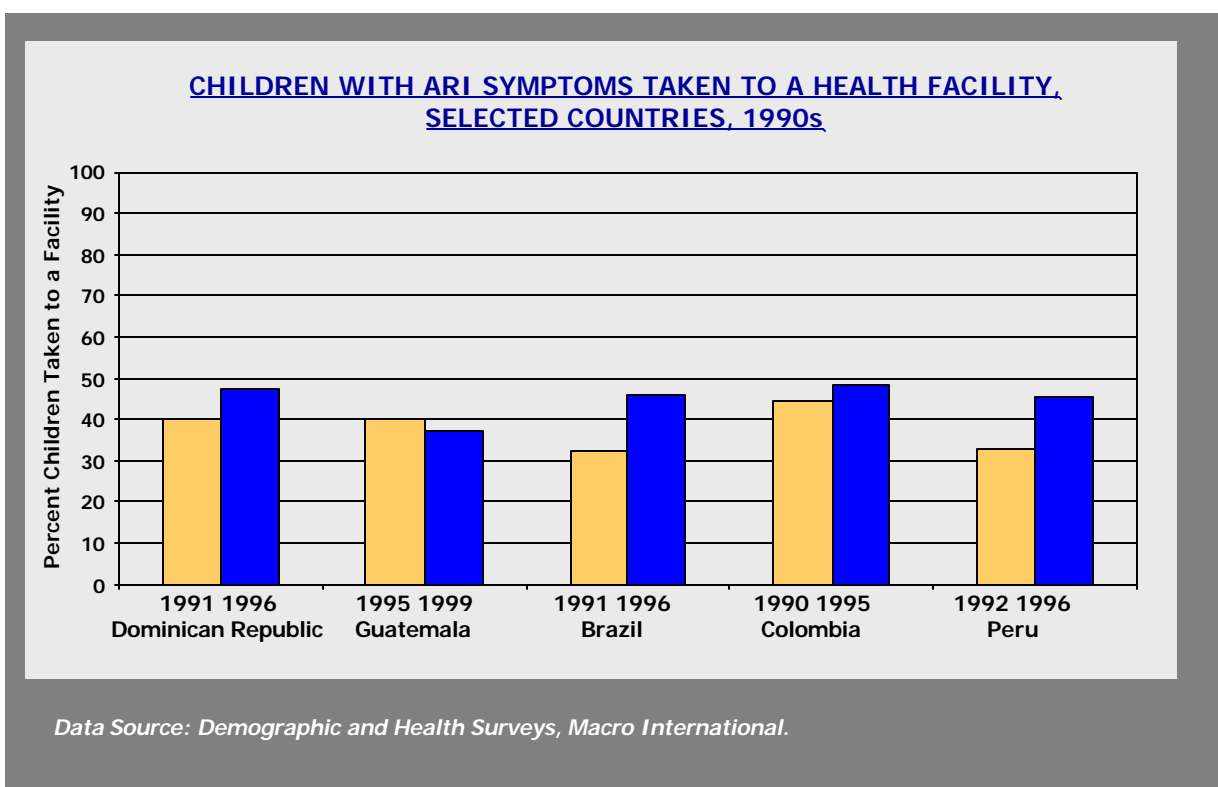
## Early Childhood Diseases: Treatment of Acute Respiratory Infections

### Goal

Reduce deaths from acute respiratory infections (ARI) by 25 percent.

### Definition

"Treatment of ARI" is measured by the percentage of children with ARI who are taken to a health facility. ARI is a common cause of death among infants and children. Prompt diagnosis and treatment can prevent many deaths.



- Except for Guatemala, each country shown here increased the percentage of children taken to health facilities when they had symptoms of ARI.
- In each of these countries, fewer than half of the children with ARI were taken to a health care facility. This is consistent with the pattern in many other developing countries – of 29 countries surveyed by DHS between 1994 and 1999, 18 had rates less than 50 percent.
- DHS results also show that mothers with some education are more likely to seek health care for a child with ARI than mothers with no education.

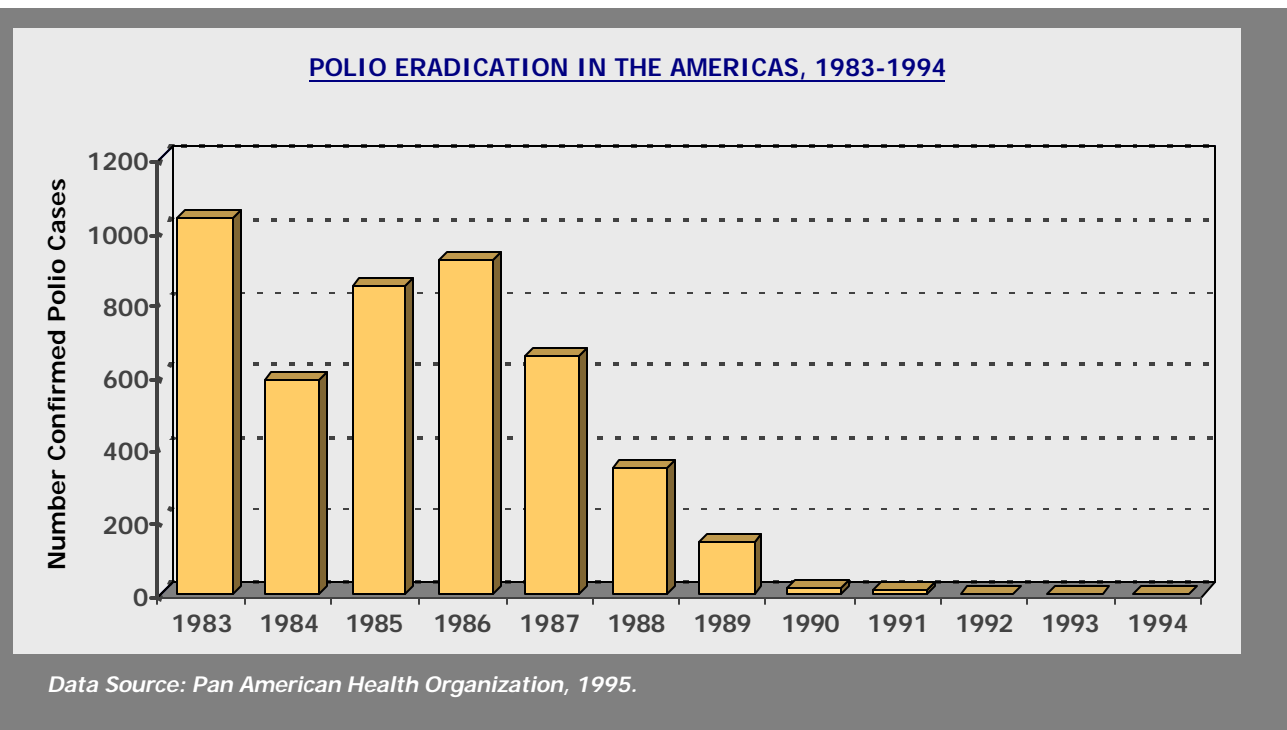
## Early Childhood Diseases: Poliomyelitis

### Goal

Eradication of poliomyelitis.

### Definition

Prevalence of polio is measured by the number of confirmed cases in the region. One of the great public health achievements of the 1990s was the eradication of polio in the Americas.



- The last wild poliovirus in Latin America and the Caribbean was detected on September 5, 1991, in Peru.
- The eradication of polio in the Americas was achieved through intense immunization activities, monitoring of vaccination coverage levels in the smallest geopolitical units, house-to-house "mop-up" campaigns in high-risk areas, enhanced surveillance of acute flaccid paralysis, rapid case investigation, community monitoring to ensure absence of the virus in both humans and the environment, and aggressive outbreak control whenever necessary to interrupt transmission.
- The polio eradication initiative has strengthened immunization services for other vaccine-preventable diseases included in the Expanded Program on Immunization of the World Health Organization. It has also fostered a culture of prevention among government officials, health workers, and communities.
- The Latin America and Caribbean region remains in danger of polio importation from regions of the world where the virus is still prevalent.

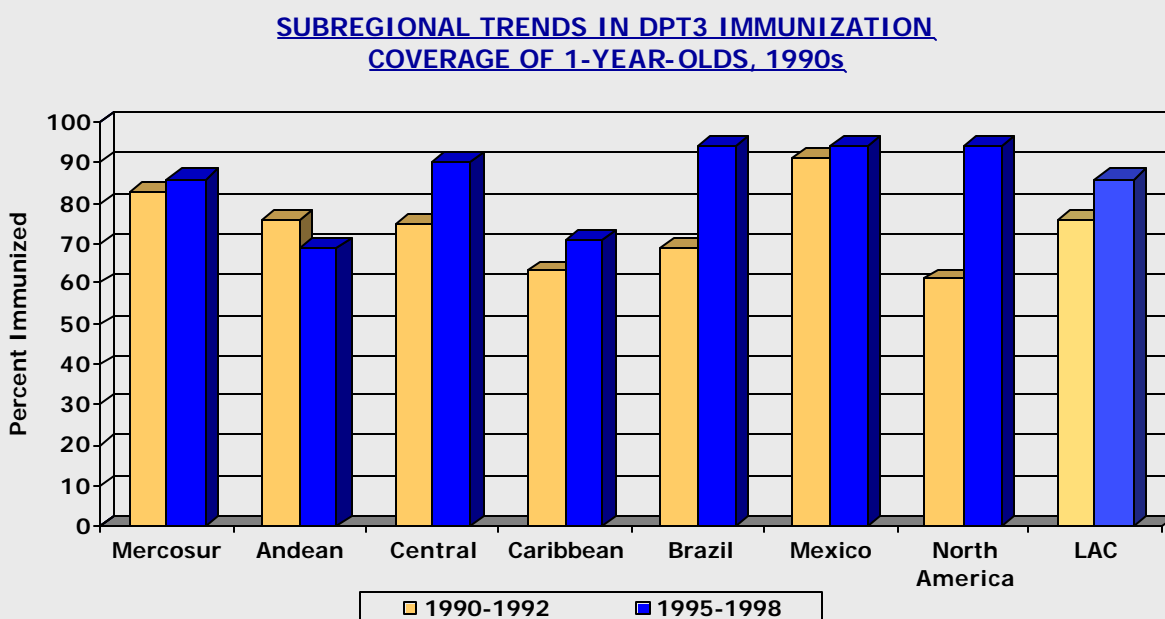
## Early Childhood Diseases: DPT3 Immunization

### Goal

Maintain a high level of immunization coverage (at least 90 percent of 1-year-olds) against diphtheria, whooping cough, tetanus, measles, poliomyelitis, and tuberculosis, and against tetanus for women of reproductive age.

### Definition

"DPT3 immunization coverage" is the proportion of living children between the ages of 12 months and 23 months who have received three complete doses of vaccines against diphtheria, pertussis (whooping cough), and tetanus. Usually the last in a child's vaccination series, DPT3 is often used as a proxy for full immunization coverage.



*Data Source: The State of the World's Children, UNICEF, 1993 and 2000.*

- In the 1990s, DPT3 vaccination coverage in the Americas increased from 70 to 89 percent. In Latin America and the Caribbean, it increased from 76 to 86 percent.
- The greater increase for the entire region reflects an increase of 33 percentage points in DPT3 coverage in North America. The large increase in North America is the result of a change in standard practice in the United States, where children are now immunized at a younger age.
- Except for Andean South America, all subregions experienced increases in DPT3 vaccination coverage in the 1990s. The increases ranged from 3 percentage points in Mexico and Mercosur to 33 percentage points in North America.
- Eighteen Latin American and Caribbean nations have met the goal of 90 percent DPT3 coverage of 1-year-olds. Nine countries are within 10 percentage points of meeting the goal, and six countries are more than 10 percentage points from the goal.
- In all nine Latin American and Caribbean countries that have DHS information on vaccination by residence, urban levels of vaccination coverage exceed rural levels. Disparities range from 4 percentage points in Guatemala to 18 percentage points in Brazil.

Figure 32

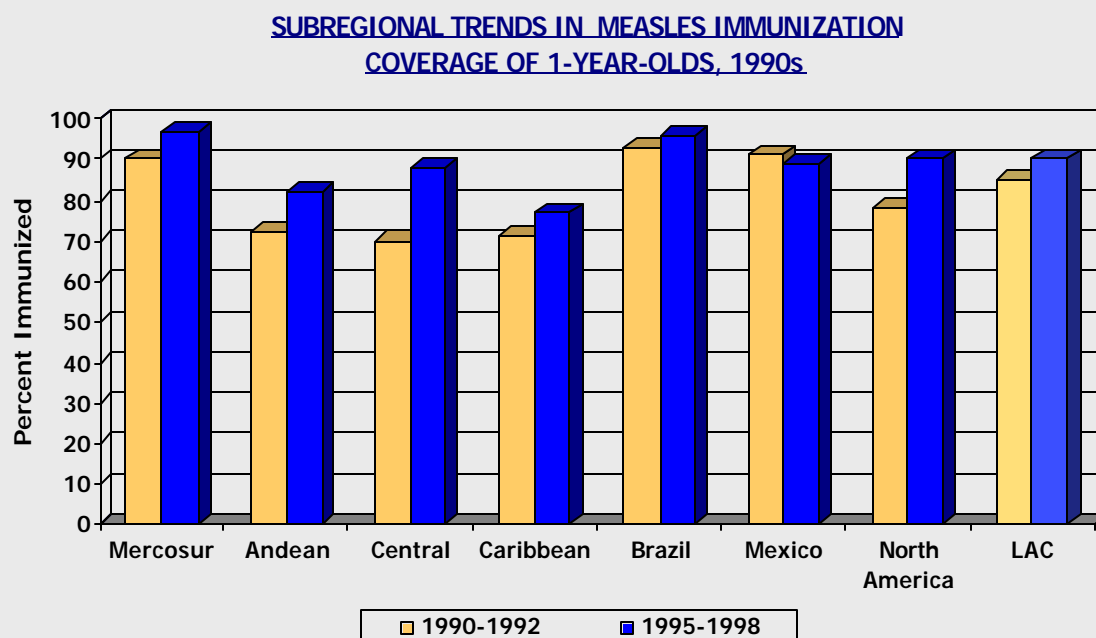
## Early Childhood Diseases: Measles Immunization

### Goal

Maintain a high level of immunization coverage (at least 90 percent of 1-year-olds) against diphtheria, whooping cough, tetanus, measles, poliomyelitis, and tuberculosis, and against tetanus for women of reproductive age.

### Definition

"Measles immunization coverage" is the percentage of 1-year-old children fully immunized against measles. In many countries, measles immunization is given at 15 months of age. Therefore, information presented here could underestimate immunization levels.



*Data Source: The State of the World's Children, UNICEF, 1993 and 2000.*

- Measles vaccination rates in Latin America and the Caribbean increased from 85 to 90 percent from the early to late 1990s. All subregions except Mexico increased their vaccination coverage. Subregional increases ranged from 3 percentage points in Brazil to 18 percentage points in Central America.
- Mercosur, Brazil, and North America had achieved average vaccination rates of or above the 90 percent goal by the late 1990s. Mexico, Central America, and Andean South America are within 10 percentage points of the goal. The Caribbean remains farthest from the goal, with 77 percent of 1-year-olds vaccinated against measles.
- Twenty-two countries (representing 42 percent of the regional population) have achieved the goal of at least 90 percent measles vaccination coverage for 1-year-olds.
- Vaccination levels vary by mothers' educational status. According to DHS data for 9 countries of the region, levels are highest for children whose mothers reached at least secondary school and lowest for children of mothers with no education.

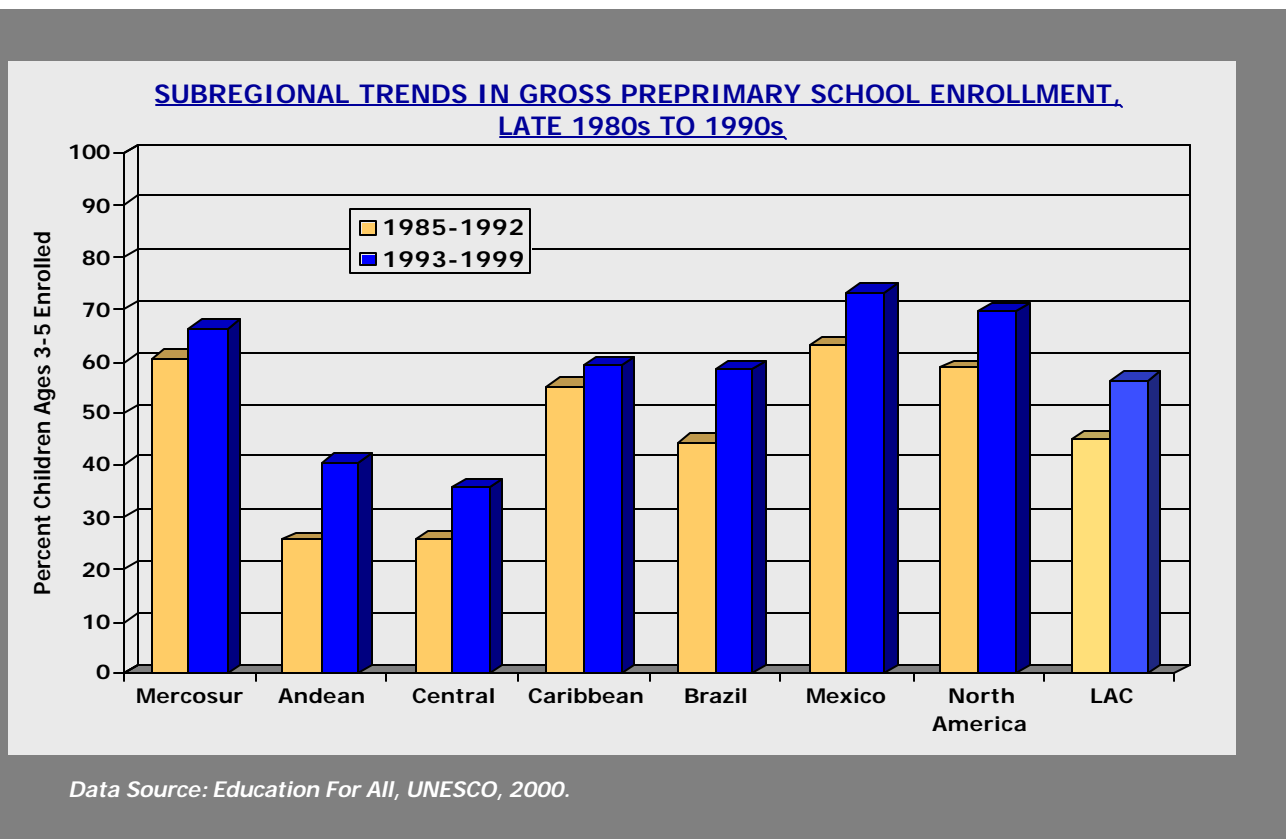
## Education

### Goal

Expand early child development including low-cost interventions among families and communities. Promote the expansion and improvement of innovative initial education and preschool programs based on the family and the community.

### Definition

"Gross preprimary school (preschool) enrollment" is the number of children registered in preprimary education divided by the number of children in the relevant age group, which is defined by country or established as ages 3 to 5 years. Children outside the relevant age group may receive preschooling; therefore, gross enrollments may exceed 100 percent. Given these qualifications, cross-national comparisons are difficult. The indicator is used to measure participation in early childhood development programs and a country's ability to prepare children for success in higher levels of schooling.



- Preprimary school enrollment in Latin America and the Caribbean increased substantially during the 1990s.
- Of 25 countries in the Americas with trend data, 23 showed increases in preschool enrollment. Colombia, Paraguay, El Salvador, and Dominican Republic more than doubled their enrollment rates.
- There is considerable variation among countries in preschool enrollments, ranging from a low of 2 percent in Suriname and Uruguay to a high of 73 percent in Mexico.
- Variations in enrollment exist within countries also. National data mask urban-rural disparities, for example.
- According to UNESCO, the educational gender gap continues to narrow in the Latin America and Caribbean region. The female-to-male ratio of preprimary school enrollment is 0.92.

Figure 34

# PRIMARY SCHOOL AGE

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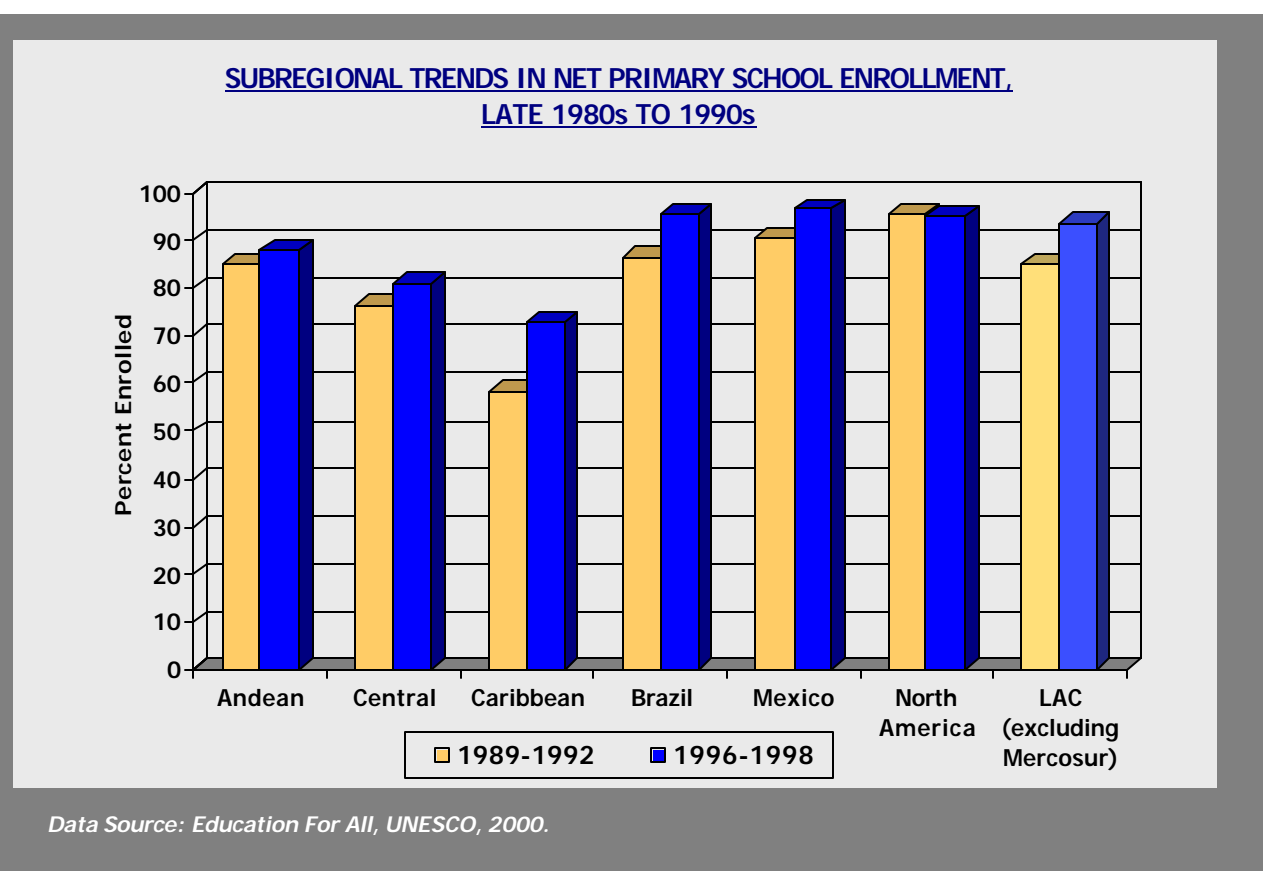
## Education

### Goal

Universal access to basic education and full primary education for at least 80 percent of children of school age through either formal or nonformal education that provides equal standards of learning and puts an emphasis on reducing disparities between girls and boys. Accomplish universal access to primary education in equal terms from the viewpoints of gender, geographic location, ethnic, socioeconomic background, and special needs groups.

### Definition

"Net primary school enrollment ratio" is the number of primary school-age children enrolled in primary education, expressed as a percentage of the eligible primary school-age population.



- During the 1990s, net primary school enrollment in the Latin America and Caribbean region increased to nearly 94 percent.
- All five Latin American and Caribbean subregions represented here had increases in enrollment in the 1990s. The greatest increase was in the Caribbean, where enrollment grew by 14 percentage points.
- Twenty-four of the 30 Latin American and Caribbean countries with available data achieved the World Summit for Children goal of 80 percent primary school enrollment.
- By the late 1990s, there was gender equity in enrollment in most countries of the region. Of the countries with data, male and female enrollments were within 4 percentage points of one another. The only exception was Saint Vincent and the Grenadines, where female enrollment was 12 percentage points lower than male enrollment.

Figure 35

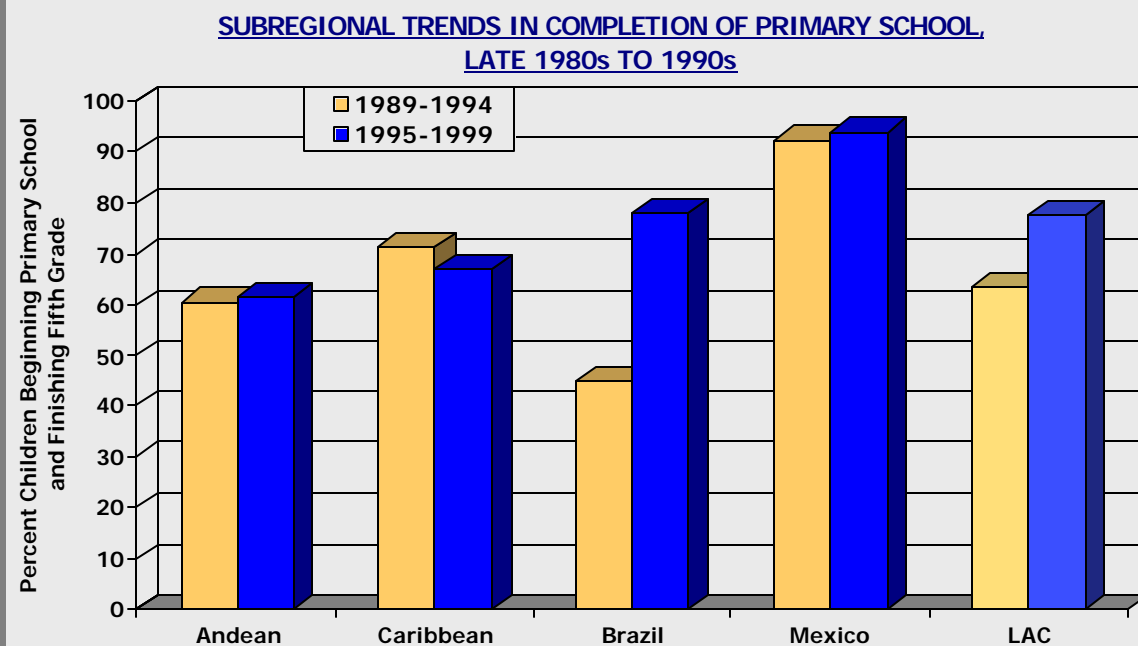
## Education

### Goal

Universal access to basic education and full primary education for at least 80 percent of children of school age through either formal or nonformal education that provides equal standards of learning and puts an emphasis on reducing disparities between girls and boys. Accomplish universal access to primary education in equal terms from the viewpoints of gender, geographic location, ethnic, socioeconomic background, and special needs groups.

### Definition

"Completion of primary school" (or "survival to grade five") is the percentage of a cohort of pupils enrolled in the first grade of primary education in a given year who eventually reach grade five. This indicator measures the "holding power" of an educational system; in addition, UNESCO has defined it as a minimum requirement for individual literacy. Interpretation of this rate should take into account the percentage of primary school-age children not enrolled in school at all, which may be substantial.

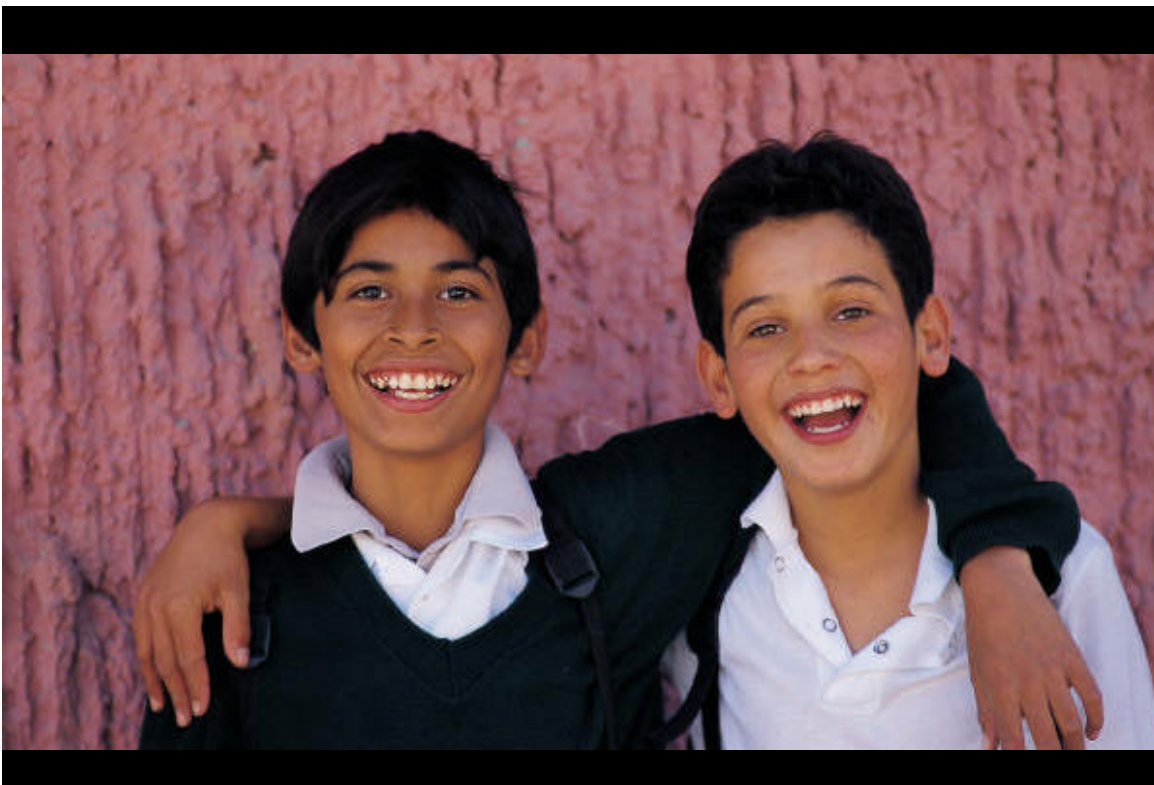


*Data Source: Education For All, UNESCO, 2000.*

- Most of the increase in primary school completion in Latin America and the Caribbean is accounted for by Brazil's 33-percentage-point increase.
- Survival rates vary considerably among Latin American and Caribbean countries. More than one-third of students in four countries dropped out of school before reaching grade five, while 92 percent of students in Chile remain enrolled.
- Among the 18 countries with trend data, "survival to grade five" improved in 12.

# ADOLESCENCE AND YOUNG ADULthood

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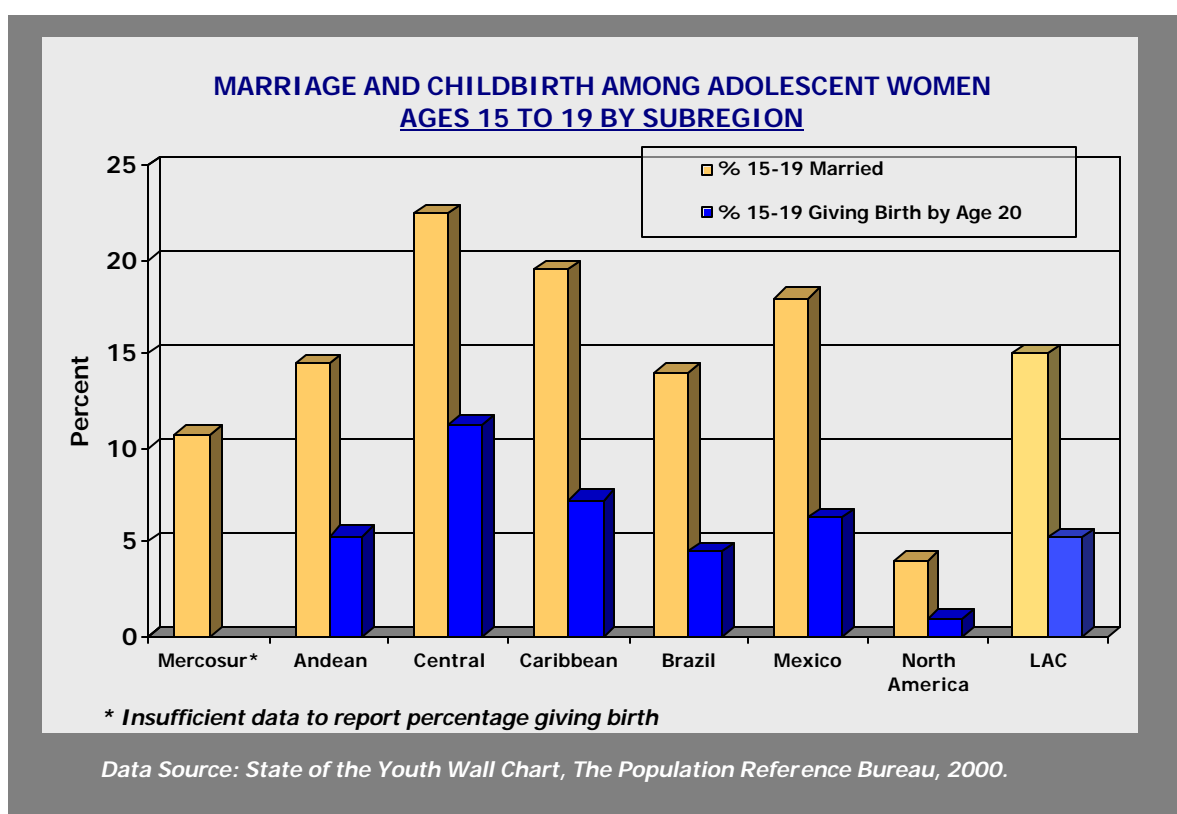
## Adolescent Marriage and Childbirth

### Goal

Provide all couples with access to information, education, communication, and services to prevent pregnancies that are too early, too closely spaced, too late, or too numerous. Promote universal access of all adolescents to adequate information and services for their special needs, geared to improving their sexual and reproductive health, and their self-care.

### Definition

The percentage of adolescent women who are married is the number of women ages 15 to 19 who are married divided by all women ages 15 to 19. The percentage giving birth by age 20 is the number of married women ages 15 to 19 who have given birth divided by the number of women ages 15 to 19. Marriage and childbirth for adolescents can severely limit life choices. These events often lead to abandonment of school, and education increasingly determines earning power and social status for a lifetime. Also, many young women are emotionally and/or physically unprepared for the rigors of birth and child care.



- Fifteen percent of all 15- to 19-year-old women in Latin America are currently married. Among these young women, 35 percent have already given birth to their first child.
- In Central America, half of 15- to 19-year-old women who marry give birth to their first child by age 20.

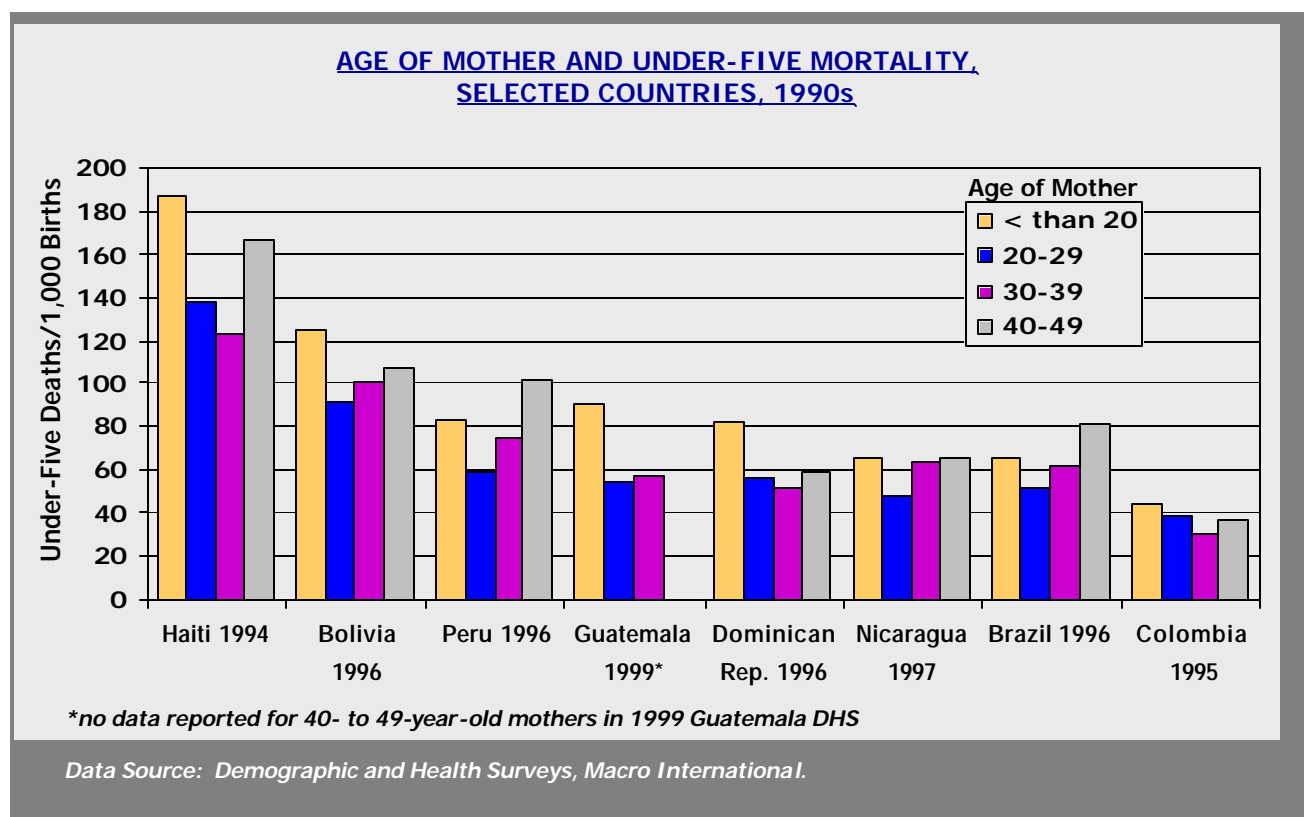
## Adolescent Marriage and Childbirth

### Goal

Provide all couples with access to information, education, communication, and services to prevent pregnancies that are too early, too closely spaced, too late, or too numerous. Promote universal access of all adolescents to adequate information and services for their special needs, geared to improving their sexual and reproductive health, and their self-care.

### Definition

The under-five mortality rate is the number of deaths among children under age 5 in a given year per 1,000 live births in that same year. Childbirth places not only adolescent mothers at risk but their children as well. Young mothers are often unprepared for child care, physically, economically, and/or emotionally.



- Countries are ranked from left to right by under-five mortality. Haiti, with 130 deaths per 1,000 live births, has the highest under-five mortality among these countries. Colombia, with 30, has the lowest.
- In each of the countries shown, the children of women ages 15 to 19 run a higher risk of dying than children of women ages 20 to 39.
- The increased risk to children of young mothers is highest in the countries with the highest under-five mortality. For example, in Haiti, the children of women ages 15 to 19 are 36 percent more likely to die than the children of mothers ages 20 to 29. In Colombia, where under-five mortality is less than one-quarter of Haiti's, the difference in mortality between mothers ages 15 to 19 and mothers ages 20 to 29 is only 18 percent.

Figure 38

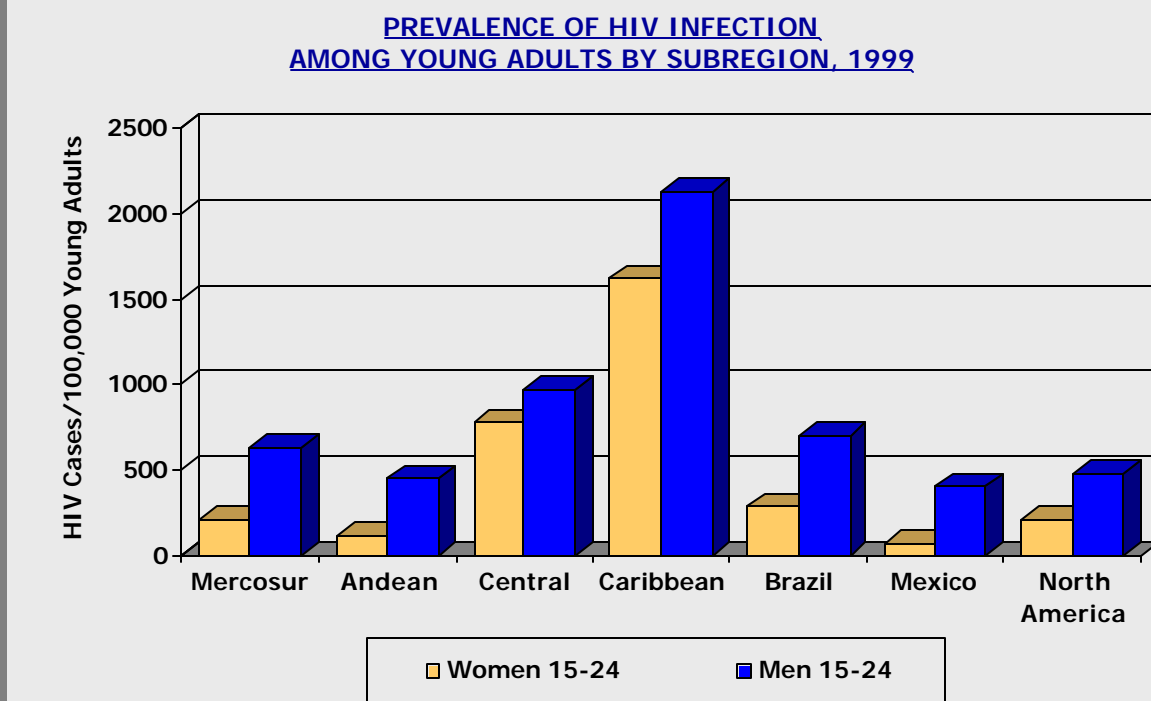
## HIV Infection

### Goal

Ensure universal access to information, education, communication, and to the appropriate means for the prevention and control of infection from HIV/AIDS, sexually transmitted diseases, and their consequences.

### Definition

The prevalence of HIV infection can be reported as the estimated number of cases per 100,000 adults. The population of young adults is people ages 15 to 24. People in this age group are becoming sexually active. A lack of knowledge and an absence of behavior change in response to the risks posed by HIV/AIDS and other sexually transmitted infections may lead to increased prevalence of HIV infection. Young women and girls are often in unequal power relationships with their partners, which may lead to difficulty in negotiating safe sexual practices, including condom usage.

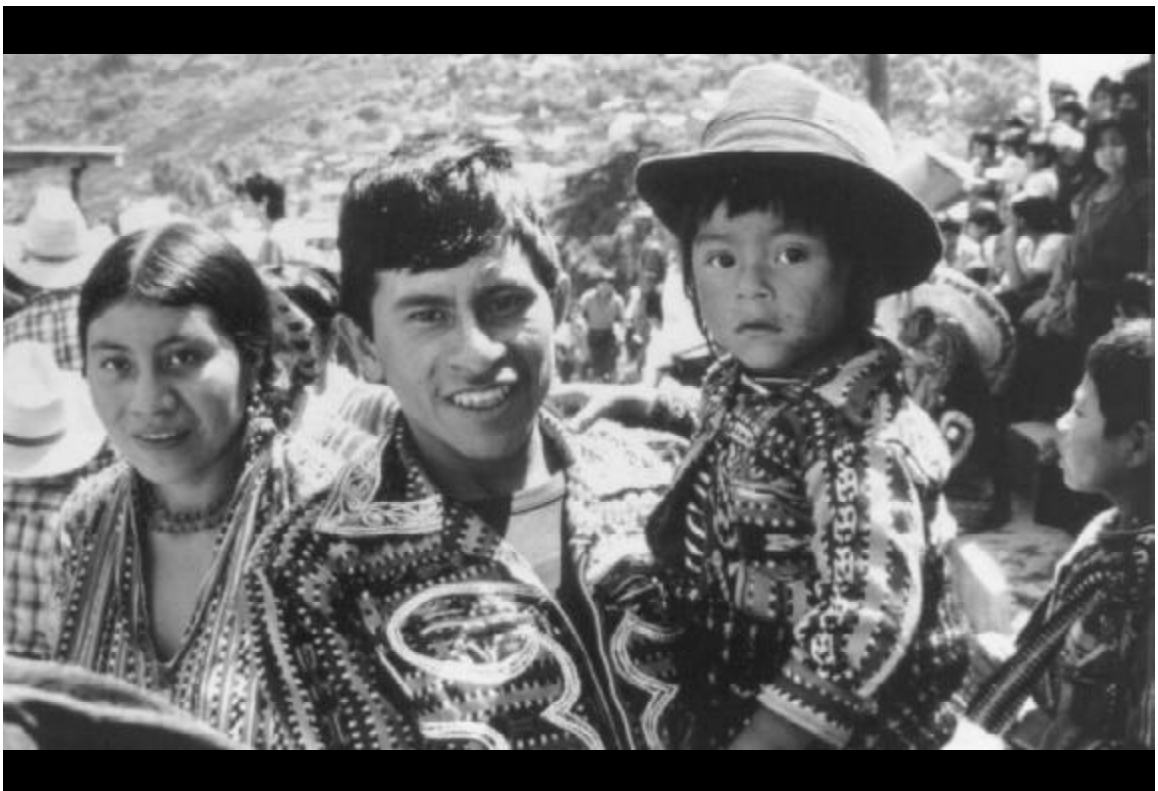


*Data Source: Report on the Global HIV/AIDS Epidemic, UNAIDS, June 2000.*

- The Caribbean nations of Haiti, Dominican Republic, Guyana, and the Bahamas have alarming HIV prevalence rates among young adults. HIV prevalence among young adults is also high in other Caribbean countries.
- Young women have lower rates of infection than young men and the adult population as a whole. This contrasts with sub-Saharan Africa, where young women have higher rates of infection than young men.

# ADULTHOOD/ COMMUNITY

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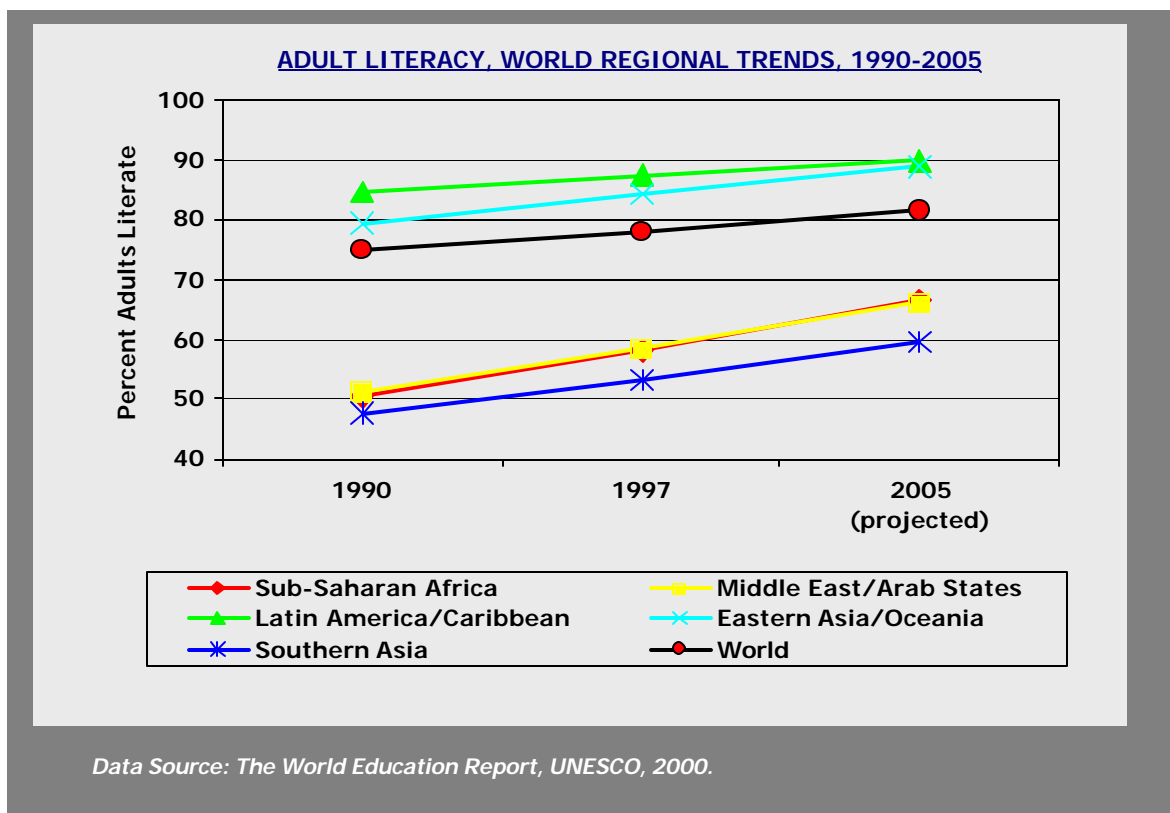
## Adult Literacy

### Goal

Reduce the illiteracy rate among adults by at least 50 percent, with special attention to women's literacy.

### Definition

The adult literacy rate is the number of literate adults expressed as a percentage of the total adult population, 15 years of age and older.



- There has been a steady increase in adult literacy in developing countries over the past decade. According to UNESCO, the estimated number of literate adults worldwide more than doubled between 1970 and 1998, from 1.5 billion to 3.2 billion.
- Sub-Saharan Africa and the Middle East show the most progress, with increases of 7.9 percent and 7.3 percent respectively. Despite such gains, these regions, along with South Asia, continue to lag behind the average world literacy rate.
- The Latin America and Caribbean region has been making steady progress toward universal literacy. Between 1990 and 1998, the regional adult literacy rate rose 3.3 percentage points to 88.6 percent.
- UNESCO estimates that at the current rate of progress, the number of men and women in the world who cannot read should decrease to 830 million by 2010.

Figure 40

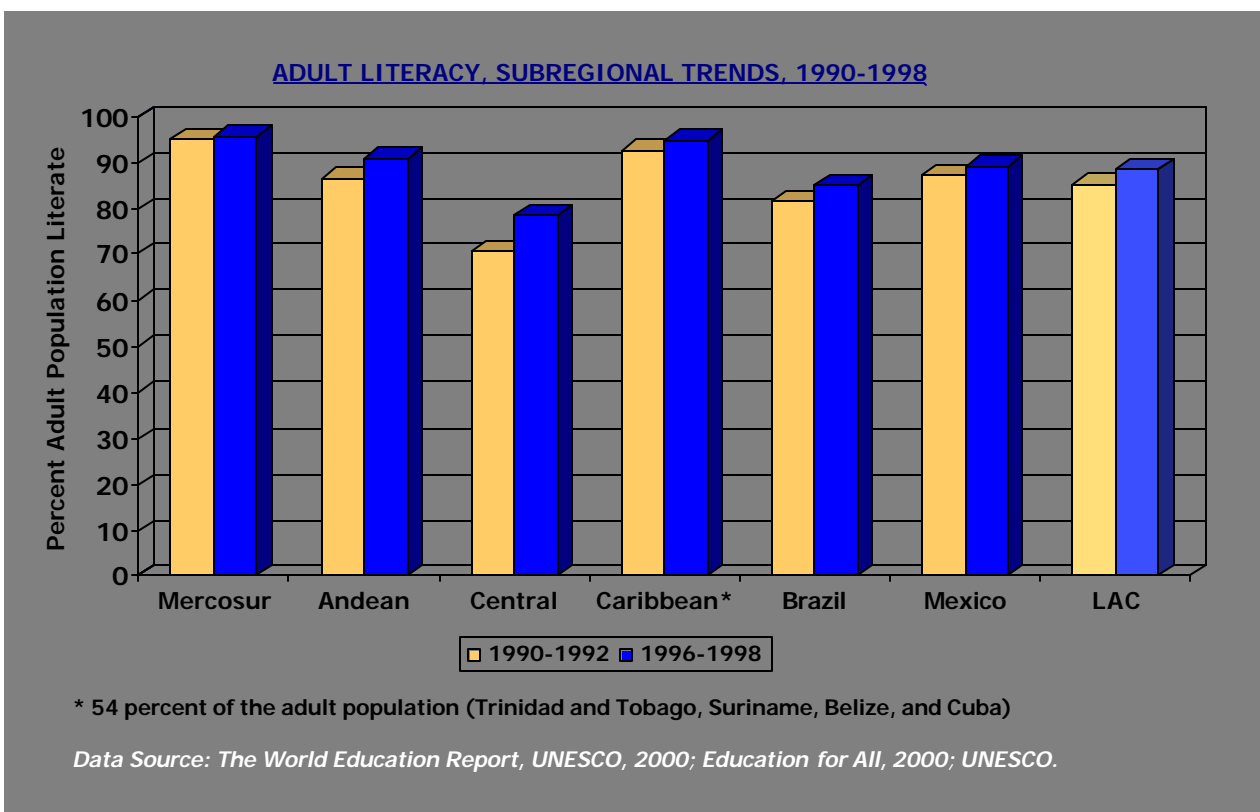
## Adult Literacy

### Goal

Reduce the illiteracy rate among adults by at least 50 percent, with special attention to women's literacy.

### Definition

The adult literacy rate is the number of literate adults expressed as a percentage of the total adult population, 15 years of age and older.



- All subregions have shown improvement in literacy since 1990, with the greatest relative gains realized in Central America. This subregion still has the lowest rates in the region, however.
- Mercosur has the highest literacy rates, well above 90 percent. The Andean subregion and Mexico follow closely behind.
- Great variations in literacy rates exist within each subregion. The Caribbean contains countries with some of the highest and lowest rates of literacy in 1997. In Haiti, only 48.5 percent of the adult population is literate, while Trinidad and Tobago has a literacy rate of 97.9 percent.

Figure 41

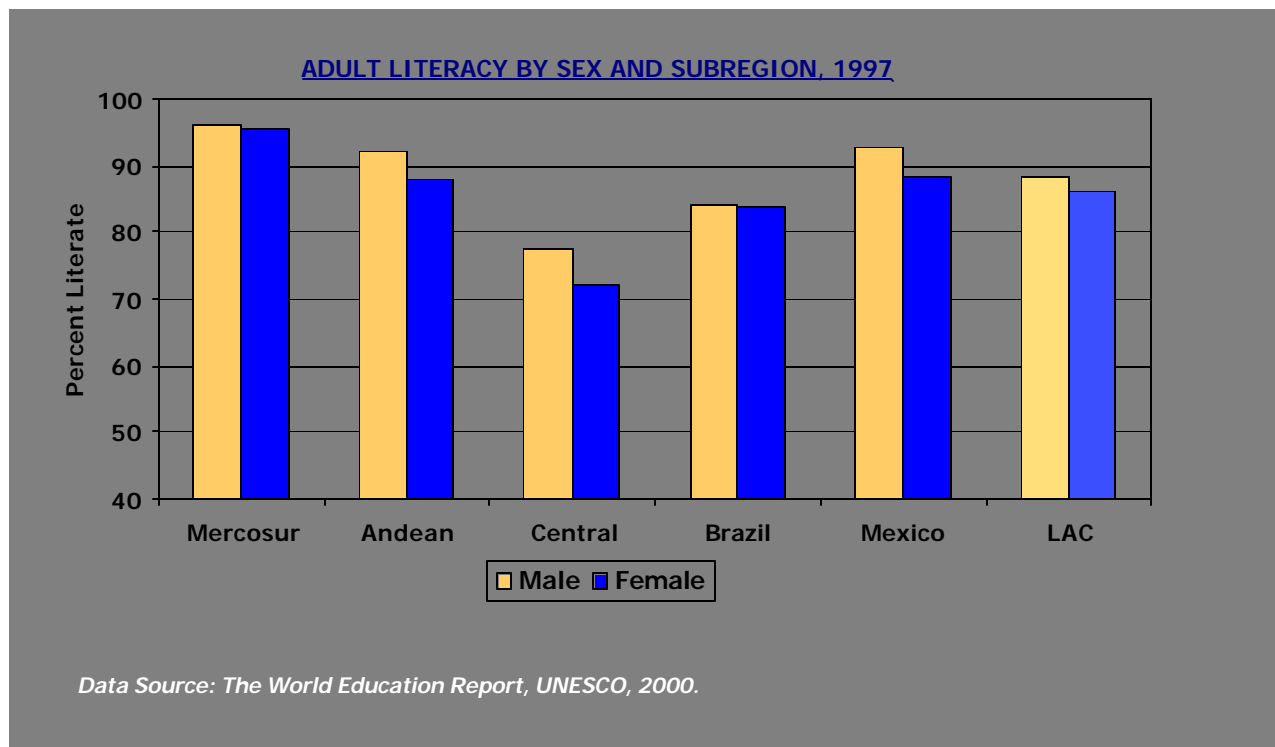
## Adult Literacy

### Goal

Reduce the illiteracy rate among adults by at least 50 percent, with special attention to women's literacy.

### Definition

The adult literacy rate is the number of literate adults expressed as a percentage of the total adult population, 15 years of age and older.



- According to UNESCO, two-thirds of the world's 880 million illiterate adults are women. In Latin America and the Caribbean, only half of the 42 million illiterate adults are women.
- The Latin America and Caribbean region has been making steady progress toward universal literacy. Between 1980 and 1997, the regional adult literacy rate rose 6.7 percentage points to 88.4 percent for men and 8.9 percentage points to 86.1 percent for women.
- The gap between male and female literacy has been closing over the past two decades. Gaps still remain, however, particularly in Central America, Mexico, and the Andean subregion.

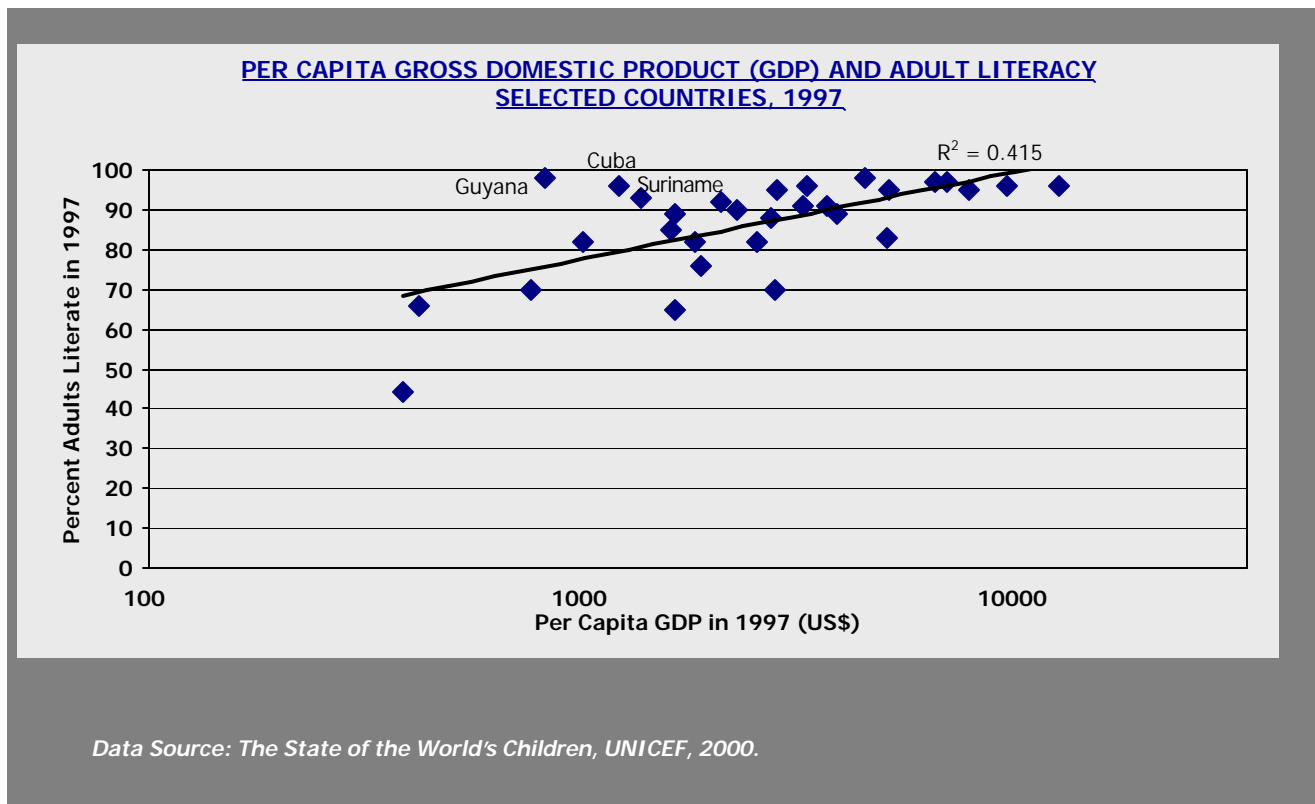
## Adult Literacy

### Goal

Reduce the illiteracy rate among adults by at least 50 percent, with special attention to women's literacy.

### Definition

The adult literacy rate is the number of literate adults expressed as a percentage of the total adult population, 15 years of age and older. Per capita Gross Domestic Product (GDP) is the gross domestic product of a country divided by the number of people in a country. In general, wealthy countries perform better than poor countries on almost all development indicators, and governments in countries with greater wealth can finance better and more comprehensive educational systems. In countries with low per capita GDP, however, relatively small increases in income will have greater impact than in countries with a larger per capita GDP.



- In general, countries with higher per capita GDP have higher adult literacy rates. However, the influence of increased per capita GDP falls with higher per capita GDP, as indicated by the log scale.
- Countries above the trendline, such as Guyana, Cuba, and Suriname, indicate that it is possible to achieve increases in adult literacy without large increases in per capita GDP.
- The trendline indicates that about 42 percent of the differences across countries in adult literacy rates is correlated with per capita GDP. The correlation shown here does not imply causality, only that countries with higher per capita GDP often have higher literacy rates.

Figure 43

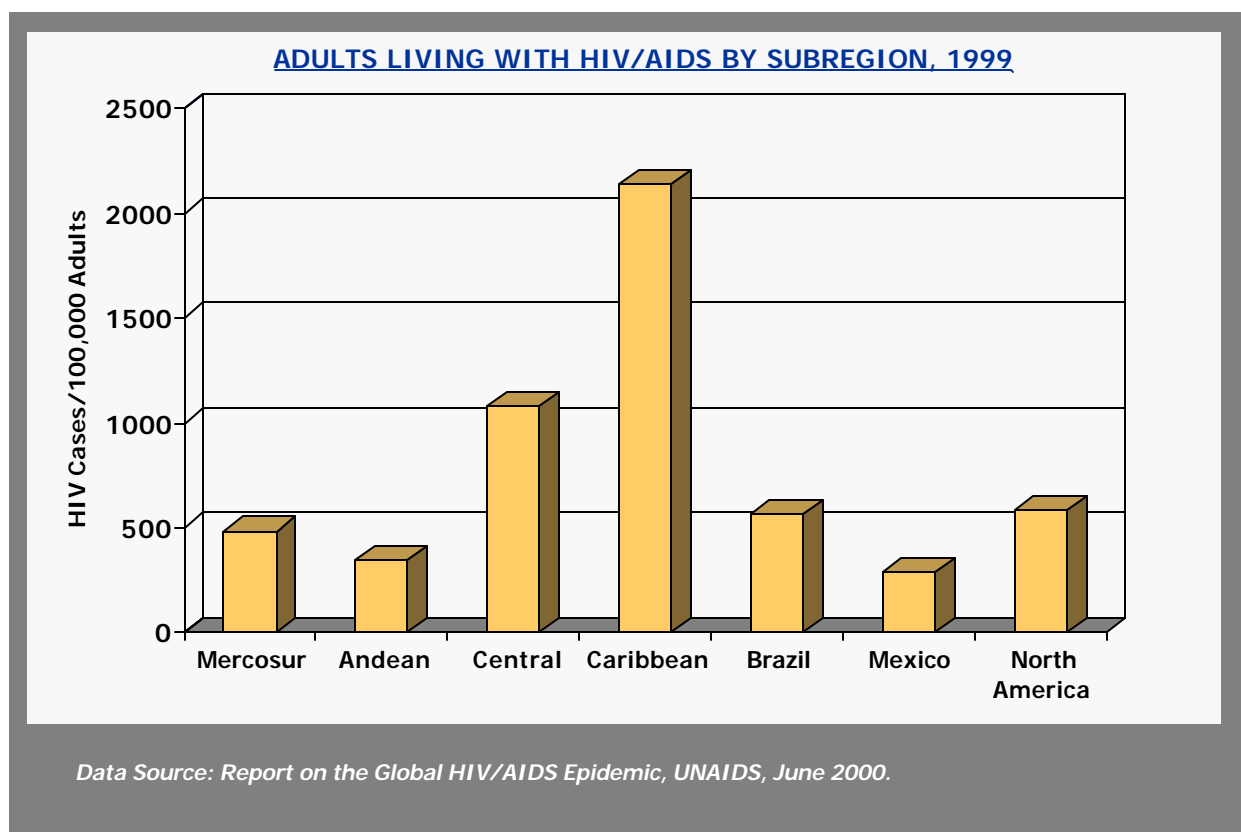
## HIV Infection/AIDS

### Goal

Ensure universal access to information, education, communication, and to the appropriate means for the prevention and control of infection from HIV/AIDS, sexually transmitted diseases, and their consequences.

### Definition

The HIV infection rate is the estimated number of HIV infections per 100,000 adults ages 15 to 49.



- Globally, the Americas rank a distant second to sub-Saharan Africa in adult HIV prevalence. Slightly over 500 adults per 100,000 adult population are infected.
- Within the Americas, the Caribbean subregion has by far the highest HIV/AIDS prevalence, with more than 2,100 cases per 100,000 adult population. This is four times the regional prevalence.
- Of the 29 countries included in this analysis, 18 have less than 1,000 cases per 100,000 adults (i.e., less than 1 percent of the adult population is infected).
- The Central American subregion also averages more than 1,000 cases per 100,000 adults. The subregion's three most populous countries (Guatemala, Honduras, and Panama) have the highest prevalence rates.

## Water/Sanitation

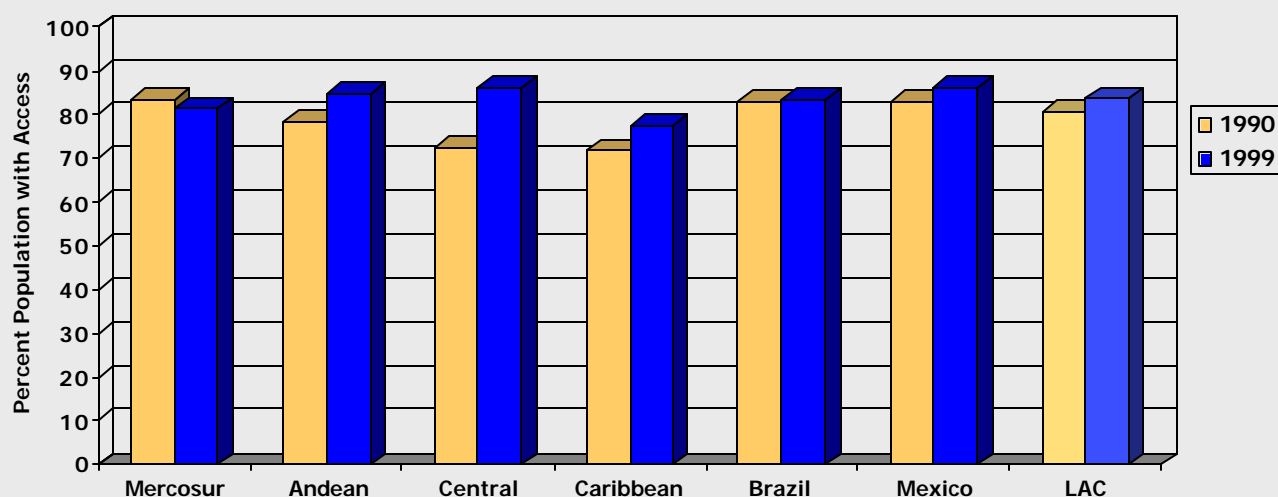
### Goal

Universal access to safe drinking water. Reduce the proportion of the population without access to safe drinking water by 25 percent.

### Definition

The availability of safe drinking water is measured in terms of "reasonable access." It is reported as the percentage of population with reasonable access to safe drinking water.

**TRENDS IN ACCESS TO SAFE DRINKING WATER BY SUBREGION, 1990s**



*Data Source: Unpublished Data, UNICEF, 2000.*

- For the region, there has been a small increase in the percentage of population with access to safe drinking water.
- Three of the six subregions realized increases of more than 5 percent. Other subregions saw relatively small changes in access to safe drinking water.
- Gains made by Central America (14 percentage points) were sufficient to enable this subregion to meet the goal of reducing the population without access to safe drinking water by 25 percent.
- Among the 30 countries with trend data, most showed improvements, and 17 achieved the goal of reducing the proportion of population without access to safe drinking water by 25 percent. Twelve of these 17 countries are in the Central America and Caribbean subregions.

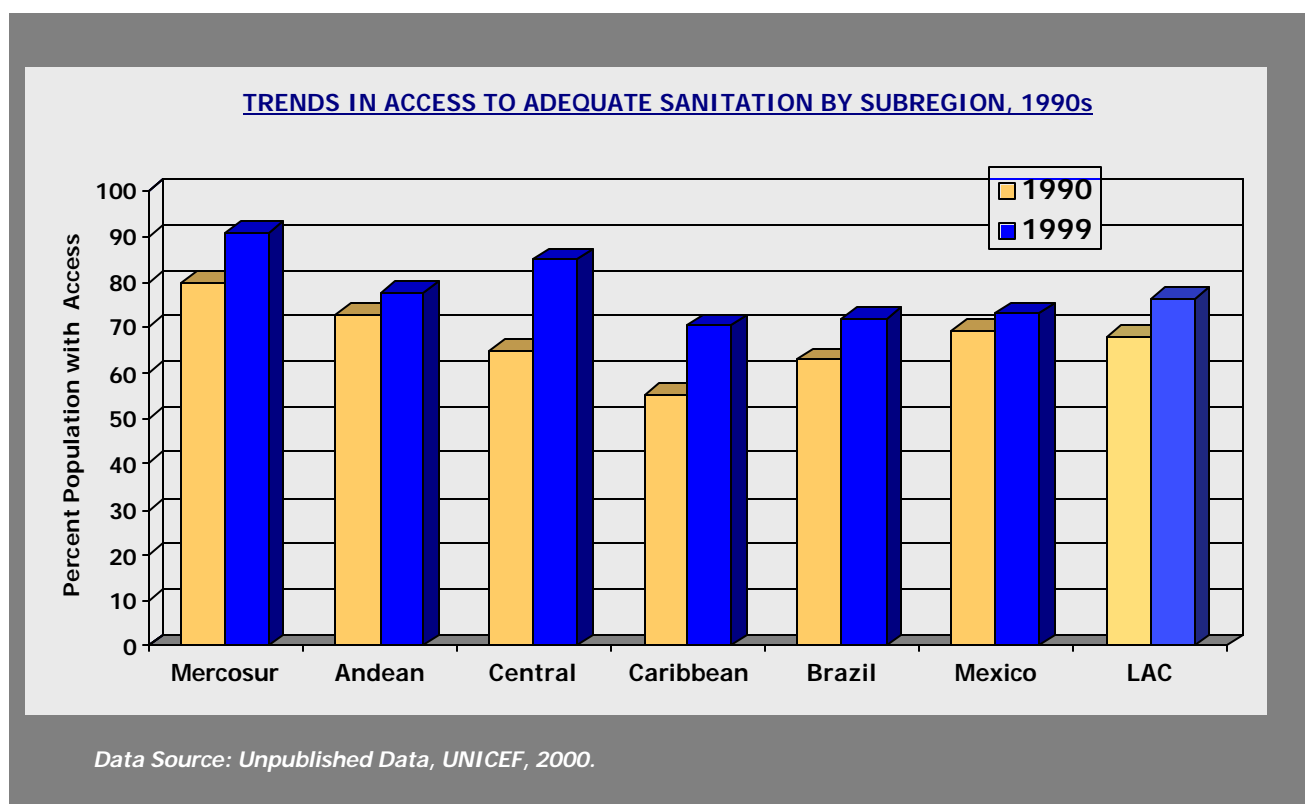
## Water/Sanitation

### Goal

Universal access to hygienic means of excreta disposal. Reduce the proportion of the population without access to basic sanitation by 17 percent.

### Definition

Adequate sanitation is measured by the percentage of the population with adequate means of excreta disposal.



➤ In the Latin America and Caribbean region, the percentage of the population with access to adequate sanitation increased from 68 percent to 76 percent during the 1990s, a change equivalent to a 25 percent decrease in the proportion of population without access. The region as a whole thus surpassed the World Summit for Children goal of a 17 percent reduction.

➤ Each subregion also experienced increases in the percentage of population with access to adequate sanitation, and all except Mexico exceeded the World Summit for Children goal. Central America experienced the greatest increase, 20 percentage points, which represented more than a 57 percent reduction in the proportion of the population without access. The other subregions exceeding the goal were Mercosur (53 percent reduction), Caribbean (33 percent), Brazil (24 percent), and Andean South America (19 percent).

Figure 46

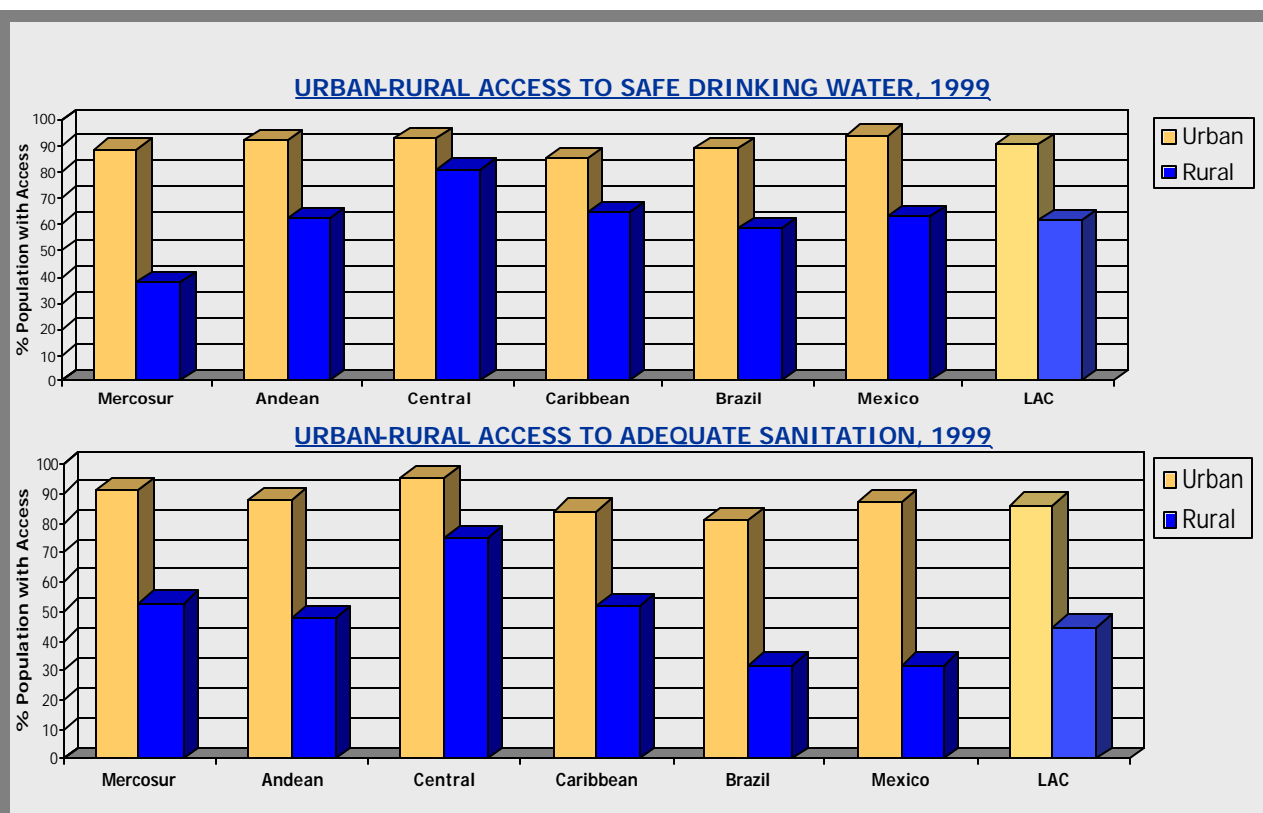
## Water/Sanitation

### Goal

Universal access to safe drinking water. Reduce the proportion of the population without access to safe drinking water by 25 percent. Universal access to hygienic means of excreta disposal. Reduce the proportion of the population without access to basic sanitation by 17 percent.

### Definition

Urban access to safe drinking water and sanitation is defined as the percentage of the population living in urban areas of 2,000 or more persons with "reasonable" access to safe water supply and with adequate means of excreta disposal. Rural access refers to those persons living outside urban areas.



Data Source: Unpublished Data, UNICEF, 2000.

- There are urban-rural disparities in access to both safe water and adequate sanitation in all subregions. The least urbanized regions (Central America and the Caribbean) have the smallest differentials.
- Urban-rural differences in access to safe drinking water range from 51 percentage points in Mercosur to 12 percentage points in Central America. Differences in sanitation access range from 55 percentage points in Mexico to 20 percentage points in Central America.
- Most country-level data follow patterns similar to the subregional patterns. A few countries, however, have very similar levels of access to water between urban and rural populations. In Costa Rica, Barbados, and Trinidad and Tobago, there is no urban-rural difference. In Uruguay, Guatemala, Panama, Haiti, and Grenada, urban access to safe drinking water exceeds rural access by less than 5 percentage points. Suriname is the only country where rural levels exceed urban levels.

Figure 47

# ENDNOTES

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## **ENDNOTES**

<b>FIGURE 1</b>	Maternal Mortality Ratios in Latin America and the Caribbean, 1990-1998	Data from <i>The State of the World's Children 2000</i> .
<b>FIGURE 2</b>	Births Attended by Trained Personnel, World Regions, 1990s	Regional averages calculated by UNICEF for <i>The State of the World's Children 2000</i> .
<b>FIGURE 3</b>	Births Attended by Trained Personnel, the Americas, 1990s	Ninety-nine percent of the region's population is represented in the graph, weighted by <i>United Nations World Population Prospects, 1996</i> .
<b>FIGURE 4</b>	Urban-Rural Differences in Births Attended by Trained Personnel, Selected Countries, 1990s	Thirty-five percent of the region's population is represented in the graph. Provider information was not available for El Salvador; urban/rural aggregates are based on percentage of hospital deliveries.
<b>FIGURE 5</b>	Mothers' Education and Births Attended by Trained Personnel, Selected Countries, 1990s	Thirty-four percent of the region's population is represented in the graph.
<b>FIGURE 6</b>	Low-Birthweight Babies by Subregion, 1990s	Ninety-nine percent of the region's population is represented in the graph.
<b>FIGURE 7</b>	World Trends in Total Fertility Rates, 1960s to 2000s	Data taken directly from <i>United Nations World Population Prospects, 1998</i> , using their regional definitions; no weighting was necessary.
<b>FIGURE 8</b>	Subregional Trends in Total Fertility Rates, Late 1980s to Late 1990s	Weights calculated by corresponding 1992 and 1998 population sizes. Ninety-nine percent of the region's population is represented in the graph.
<b>FIGURE 9</b>	Urban-Rural Differences in Fertility, Selected Countries, 1990s	Weights calculated by corresponding 1992 and 1998 population sizes. Thirty-five percent of the region's population is represented in the graph.
<b>FIGURE 10</b>	Mothers' Education and Fertility, Selected Countries, 1990s	Thirty-five percent of the region's population is represented in the graph.

## **ENDNOTES**

<b>FIGURE 11</b>	Subregional Trends in Contraceptive Use by Married Women of Reproductive Age, 1980s to 1990s	Percentages of reproductive age women represented for each subregion are 79 percent for Andean, 100 percent for Central America, and 53 percent for the Caribbean. Due to limited Mercosur data (Paraguay only), the subregion was not included in the Latin America/Caribbean regional average.
<b>FIGURE 12</b>	World Trends in Infant Mortality, 1960s to 2000s	Data taken directly from <i>United Nations World Population Prospects, 1998</i> , using their regional definitions; no weighting was necessary.
<b>FIGURE 13</b>	Subregional Trends in Infant Mortality, 1960-2000	Ninety-nine percent of the region's population is represented in the graph. Mortality data weighted by population under age 5 in each of the years.
<b>FIGURE 14</b>	Trends in Maternal Tetanus Toxoid Vaccinations, Selected Countries, 1990s	Data for graph come from Demographic and Health Surveys. Data are for five years prior to survey, except Bolivia 1994 data, which are three years prior to survey. Other information from WHO, <i>Neonatal Tetanus: Progress towards the Global Elimination of Neonatal Tetanus, 1990-1997</i> . Geneva: WHO, 2000.
<b>FIGURE 15</b>	Subregional Trends in Under-Five Mortality, 1960-1998	Ninety-nine percent of the region's population is represented in the graph. Mortality data weighted by population under age 5 in each of the years.
<b>FIGURE 16</b>	Neonatal, Post-Neonatal, and Child Mortality, Selected Countries, 1990s	Thirty-five percent of the region's population is represented in the graph.
<b>FIGURE 17</b>	Urban-Rural Differences in Under-Five Mortality, Selected Countries, 1990s	Thirty-five percent of the region's population is represented in the graph.
<b>FIGURE 18</b>	Mothers' Education and Under-Five Mortality, Selected Countries, 1990s	Thirty-four percent of the region's population is represented in the graph.
<b>FIGURE 19</b>	Per Capita Gross Domestic Product and Under-Five Mortality, Late 1990s	Ninety-nine percent of the region's population is represented in the graph. Per capita GDP numbers were converted to log base 10.

## **ENDNOTES**

<b>FIGURE 20</b>	Underweight Preschool Children, Developing Regions, 1980-2000	Percentage of region's population represented in the graph is not available. United Nations world regional definitions used.
<b>FIGURE 21</b>	Underweight Preschool Children, Latin America and Caribbean, 1980-2000	Percentage of region's population represented in the graph is not available. United Nations world regional definitions used.
<b>FIGURE 22</b>	Stunting, Subregional and Developing Country Trends, 1980-2005	Percentage of region's population represented in the graph is not available. United Nations world regional definitions used.
<b>FIGURE 23</b>	Exclusive Breastfeeding, Infants < 4 Months of Age, Selected Countries, 1990-2000	Data available from 12 countries in the region representing 38 percent of the region's population. 1990 and 2000 figures are derived from linear estimation of available data from the 1980s and 1990s.
<b>FIGURE 24</b>	Breastfed Infants Ages 0-9 Months Receiving Complementary Foods, Selected Countries, 1990s	Nine countries, comprising 56 percent of the region's infant population, are represented here.
<b>FIGURE 25</b>	Trends in Continued Breastfeeding, Selected Countries, Late 1980s to Late 1990s	Eight countries, comprising 55 percent of the region's infant population, are represented here.
<b>FIGURE 26</b>	Consumption of Iodized Salt by Subregion, 1990s	Data available for 61 percent of the regional population. Additional information from UNICEF, <i>Ending Iodine Deficiency Forever: A Goal Within Our Grasp</i> , May 2000.
<b>FIGURE 27</b>	Prevalence of Vitamin A Deficiency, LAC, 1985-1995	Prevalence estimates are calculated from an interpolation model based on 35 countries. Details of the methodology can be found in MI/UNICEF/Tulane paper <i>Progress in Controlling Vitamin A Deficiency</i> , Appendix II, 1998.

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<b>FIGURE 28</b>	Vitamin A Supplementation Coverage, World Regions and Selected LAC Countries, 1998	Percentage of world region's populations represented in the graph is not available.
<b>FIGURE 29</b>	Children with Diarrhea Given ORT, Selected Countries, 1990s	Data for graph come from Demographic and Health Surveys. Thirty-five percent of the region's population is represented in the graph. Comparable data were not available for El Salvador.
<b>FIGURE 30</b>	Children with ARI Symptoms Taken to a Health Facility, Selected Countries, 1990s	Data for graph come from Demographic and Health Surveys. Thirty-five percent of the region's population is represented in the graph. Comparable data were not available for El Salvador.
<b>FIGURE 31</b>	Polio Eradication in the Americas, 1983-1994	Data from Pan American Health Organization. Additional information from PAHO, <i>Epidemiological Bulletin</i> , Vol. 21, No. 3, April 1999.
<b>FIGURE 32</b>	Subregional Trends in DPT3 Immunization Coverage of 1-Year-Olds, 1990s	Ninety-nine percent of the region's population is represented in the graph. Additional information gathered from various Demographic and Health Surveys.
<b>FIGURE 33</b>	Subregional Trends in Measles Immunization Coverage of 1-Year-Olds, 1990s	Ninety-nine percent of the region's population is represented in the graph. Additional information gathered from various Demographic and Health Surveys.
<b>FIGURE 34</b>	Subregional Trends in Gross Preprimary School Enrollment, Late 1980s to 1990s	Subregional percentages of preprimary school children represented here are as follows: Mercosur, 100 percent; Andean, 92.6 percent; Central America, 100 percent; Caribbean, 60.25 percent.
<b>FIGURE 35</b>	Subregional Trends in Net Primary School Enrollment, Late 1980s to 1990s	Due to limited data, Mercosur subregion was only represented by 39 percent of the school-age population and was therefore not included in the regional weighted average. School-age representation for each subregion is 64 percent for Andean, 100 percent for Central, 56 percent for the Caribbean.

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<b>FIGURE 36</b>	Subregional Trends in Completion of Primary School, Late 1980s to 1990s	Due to limited data over time, 39.6 percent of Mercosur and 44.3 percent of Central America school-age children were represented and were therefore not included in the regional weighted average. For the Andean subregion, 67.4 percent of primary school-age children are represented; 67.5 percent are represented for the Caribbean.
<b>FIGURE 37</b>	Marriage and Childbirth Among Adolescent Women Ages 15 to 19 by Subregion	Percentages weighted by population of adolescent women ages 15 to 19. Insufficient observations to calculate average for the percentage of adolescent women giving birth in the Mercosur subregion. The Caribbean average is based on data from the Dominican Republic, Haiti, and Trinidad and Tobago.
<b>FIGURE 38</b>	Age of Mother and Under-Five Mortality, Selected Countries, 1990s	Reference period is previous 10 years. Thirty-four percent of the region's population is represented in the graph.
<b>FIGURE 39</b>	Prevalence of HIV Infection Among Young Adults by Subregion, 1999	Ninety-nine percent of the region's population is represented in the graph. Subregional averages are weighted by relevant population cohorts. HIV prevalence rates are the average of the high and low estimates.
<b>FIGURE 40</b>	Adult Literacy, World Regional Trends, 1990-2005	Data taken directly from <i>World Education Report</i> , UNESCO, 2000, using its regional definitions; no weighting necessary.
<b>FIGURE 41</b>	Adult Literacy, Subregional Trends, 1990-1998	Twenty countries, comprising 96.7 percent of the region's adult population, are represented here.
<b>FIGURE 42</b>	Adult Literacy by Sex and Subregion, 1997	The Caribbean is represented by Cuba, Guyana, Haiti, Jamaica, Suriname, and Trinidad and Tobago.
<b>FIGURE 43</b>	Per Capita Gross Domestic Product and Adult Literacy, Selected Countries, 1997	

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<b>FIGURE 44</b>	Adults Living with HIV/AIDS by Subregion, 1999	Rates are estimates based on approximately 100 percent of the adult population, ages 15 to 49. The Caribbean is an exception in that the smaller island nations were not included. Caribbean countries included are Bahamas, Barbados, Cuba, Dominican Republic, Guyana, Haiti, Jamaica, Suriname, and Trinidad and Tobago.
<b>FIGURE 45</b>	Trends in Access to Safe Drinking Water by Subregion, 1990s	Drinking water data from UNICEF.
<b>FIGURE 46</b>	Trends in Access to Adequate Sanitation by Subregion, 1990s	Sanitation data from UNICEF. The entire population of Latin America is represented by the data.
<b>FIGURE 47</b>	Urban-Rural Access to Safe Drinking Water and Adequate Sanitation, 1999	Drinking water and sanitation data from UNICEF. Country-level 1999 urban and rural population sizes were calculated using 1998 country-level urban and rural population percentages and 1999 total population sizes.



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